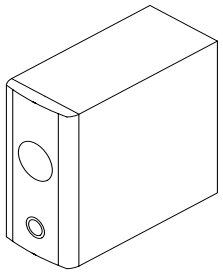
Pioneer sound.vision.soul

Service Manual



S-DV1000SW

ORDER NO.
RRV2692

POWERED SUBWOOFER

S-DV1000SW

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
S-DV1000SW	KUCXJI	AC120V	
S-DV1000SW	MYXJI	AC220-230V	
S-DV1000SW	NVXJI	AC230V	

This product does not finction properly when independent ; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

Component	System	Service Manual	Remarks
DVD/CD TUNER	XV-DV1000	RRV2672	
POWERED SUBWOOFER	S-DV1000SW	RRV2692	This Manual
SPEAKER SYSTEM	S-DV1000ST	RRV2697	

For details, refer to "Important symbols for good services".

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ⓒ**PIONEER CORPORATION 2002**

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SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

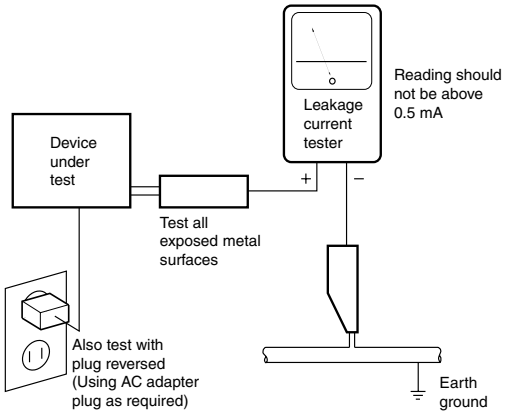
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.


Reading should not be above 0.5 mA
Leakage current tester
Device under test
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important symbols for good services]
In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

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1. SPECIFICATIONS

Amplifier Section

Continuous Power (RMS).....75 W / channel
(1 kHz, THD 10%, 6 Ω)

Miscellaneous

Power Requirements
European model.....220 – 230 V / 50 – 60 Hz
North American model ..... 120 V / 60 Hz
Power Consumption
European model..... 176 W
North American model ..... 180 W
Power Consumption in standby mode ..... 0.4 W

Powered subwoofer (S-DV1000SW)

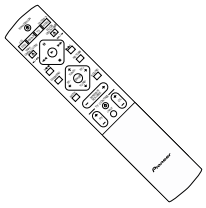
Type..... Bass reflex floor type, antimagnetic
Speaker..... 18 cm (7 1/16 in.) (cone type)
Nominal impedence ..... 6 Ω
Frequency range ..... 25 – 2,300 Hz
Max. input ..... 75 W (EIAJ)
Dimensions ..... 191 (W) x 436 (D) x 395 (H) mm
(North American model)
..... 190 (W) x 436 (D) x 395 (H) mm
(European model)
Weight ..... 13.0 kg (North American model)
.....12.9 kg (European model)

Note

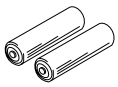
- Specifications and design subject to possible modification without notice, due to improvements.

accessories

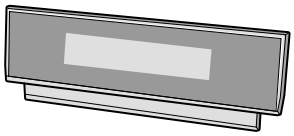
Remote control unit
(KUCXJI : AXD7340)
(MYXJI, NVXJI : AXD7339)



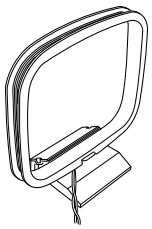
Dry cell batteries
(sizeAA/R6P) x2



Display unit (AXX7142)

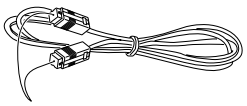


AM loop antenna
(ATB7009)



FM antenna
(KUCXJI : ADH7007)
(MYXJI, NVXJI : ADH7010)

Control cable A
(ADE7064)

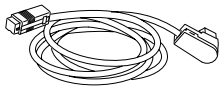


Blue plugs

Control cable B
(ADE7079)

Black plugs

Display cable
(ADE7077)

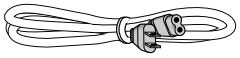


Gray

Video cord
(VDE1024)

Yellow plugs

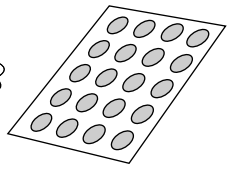
Power cord
(KUCXJI : ADG7022)
(MYXJI : ADG1154)
(NVXJI : ADG1156)



Speaker cords
5 m x 3 (for center, front L-R speakers)
(SDS1115) (SDS1116) (SDS1117)

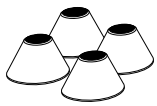
10 m x 2 (for rear L-R speakers)
(SDS1118) (SDS1119)

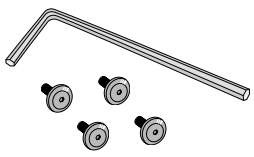
Non-slip padsx20
(SEC1635)



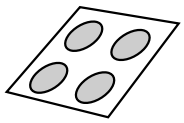
Operating instructions / Warranty

European model only:
Isolation feet x4
(SXK1049)





Non-slip pads
(subwoofer) x4
(SEC1563)

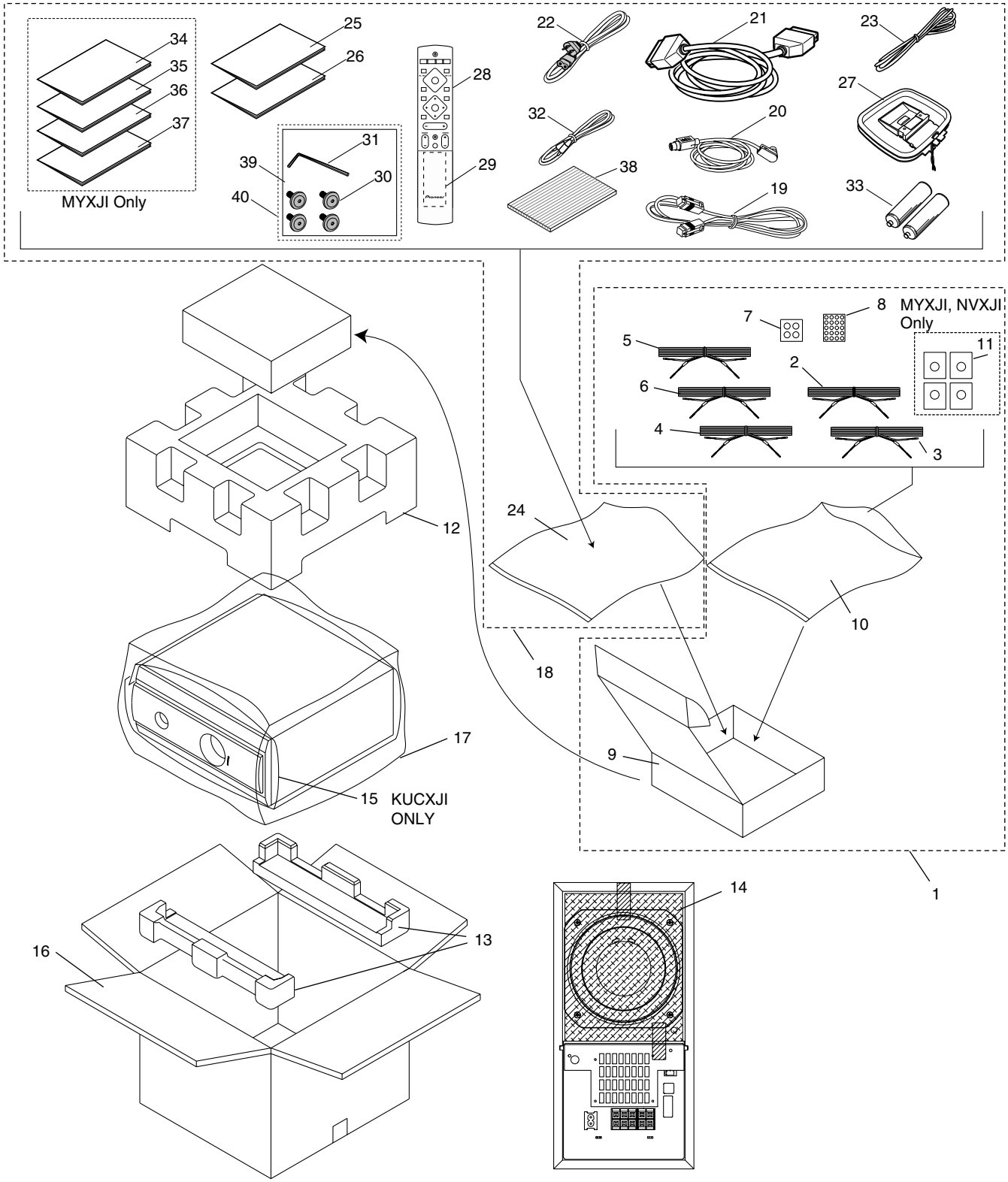


Allen key wrench
& 4 screws
(AEF7007)
(ABA7089)

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions, apply as you think it appropriate.)*

2.1 PACKING



PACKING parts List

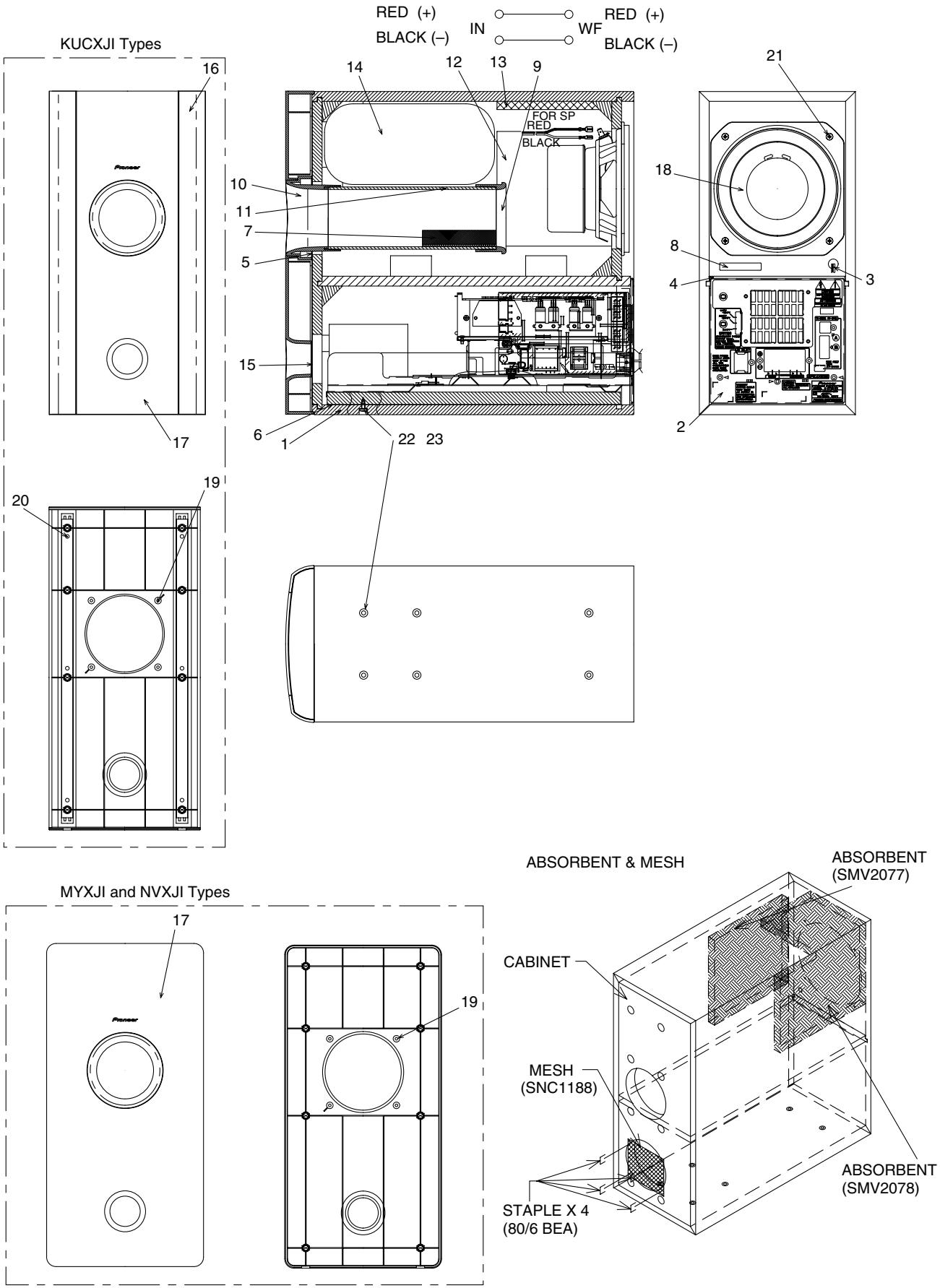
Mark	No.	Description	Part No.
NSP	1	Accessories Set	See Contrast table (2)
	2	Speaker Cords (5m : Red)	SDS1115
	3	Speaker Cords (5m : White)	SDS1116
	4	Speaker Cords (5m : Green)	SDS1117
	5	Speaker Cords (10m : Blue)	SDS1118
	6	Speaker Cords (10m : Gray)	SDS1119
	7	Sheet of large Non-Slip Pads	SEC1563
	8	Sheet of small Non-Slip Pads	SEC1635
	9	Packing Case	SHG2449
	10	Poly Bag S3	SHL1293
	11	Accessory Set (Subwoofer Isolation Feet)	See Contrast table (2)
	12	Top Protector	SHA2361
	13	Bottom Protector	SHA2362
	14	Protector	SHB1097
	15	Protection Sheet	See Contrast table (2)
	16	Packing Case	See Contrast table (2)
	17	Poly Bag S6	SHL1292
NSP	18	Accessories Assy	See Contrast table (2)
	19	Control Cable A (Blue Plugs)	ADE7064
	20	Display cable (Gray Plugs)	ADE7077
	21	Control cable B (Black Plugs)	ADE7079
⚠	22	Power Cord	See Contrast table (2)
	23	FM Antenna	See Contrast table (2)
NSP	24	Poly Bag	AHG7098
	25	Operating Instructions (English/French)	ARE7305
	26	Setup guide(English/French)	ARE7306
	27	AM Loop Antenna	ATB7009
	28	Remote Control Unit	See Contrast table (2)
	29	Battery Cover	AZN7919
	30	Side Panel Replacement Screw	ABA7089
	31	Allen Key Wrench	AEF7007
	32	Video Cord (Yellow)	VDE1024
NSP	33	Dry cell batteries (AA/R6P)	VEM1031
	34	Operating Instructions (German/Italian)	See Contrast table (2)
	35	Setup guide (German/Italian)	See Contrast table (2)
	36	Operating Instructions (Spanish/Dutch)	See Contrast table (2)
	37	Setup guide (Spanish/Dutch)	See Contrast table (2)
NSP	38	Accessory Board	AHB7082
NSP	39	Poly Sheet	AHG7100
NSP	40	Screw Asy	AXX7146

(2) CONTRAST TABLE

S-DV1000SW/KUCXJI, MYXJI and NVXJI are constructed the same except for the following:

Mark	No.	Symbol and Description	S-DV1000SW/ KUCXJI	S-DV1000SW/ MYXJI	S-DV1000SW/ NVXJI
NSP	1	Accessories Set	SME3356	SME3355	SME3355
	11	Accessory Set (Subwoofer Isolation Feet)	Not used	SEA1596	SEA1596
	15	Protection Sheet	SHC1790	Not used	Not used
	16	Packing Case	SHG2454	SHG2450	SHG2453
NSP	18	Accessories Assy	AXX7137	AXX7136	AXX7141
⚠	22	Power Cord	ADG7022	ADG1154	ADG1156
	23	FM Antenna	ADH7007	ADH7010	ADH7010
	28	Remote Control Unit	AXD7340	AXD7339	AXD7339
	34	Operating Instructions (German/Italian)	Not used	ARC7414	Not used
	35	Setup guide (German/Italian)	Not used	ARC7415	Not used
	36	Operating Instructions (Spanish/Dutch)	Not used	ARC7416	Not used
	37	Setup guide (Spanish/Dutch)	Not used	ARC7417	Not used

2.2 PRODUCT APPEARANCE SECTION



PRODUCT APPEARANCE SECTION parts List

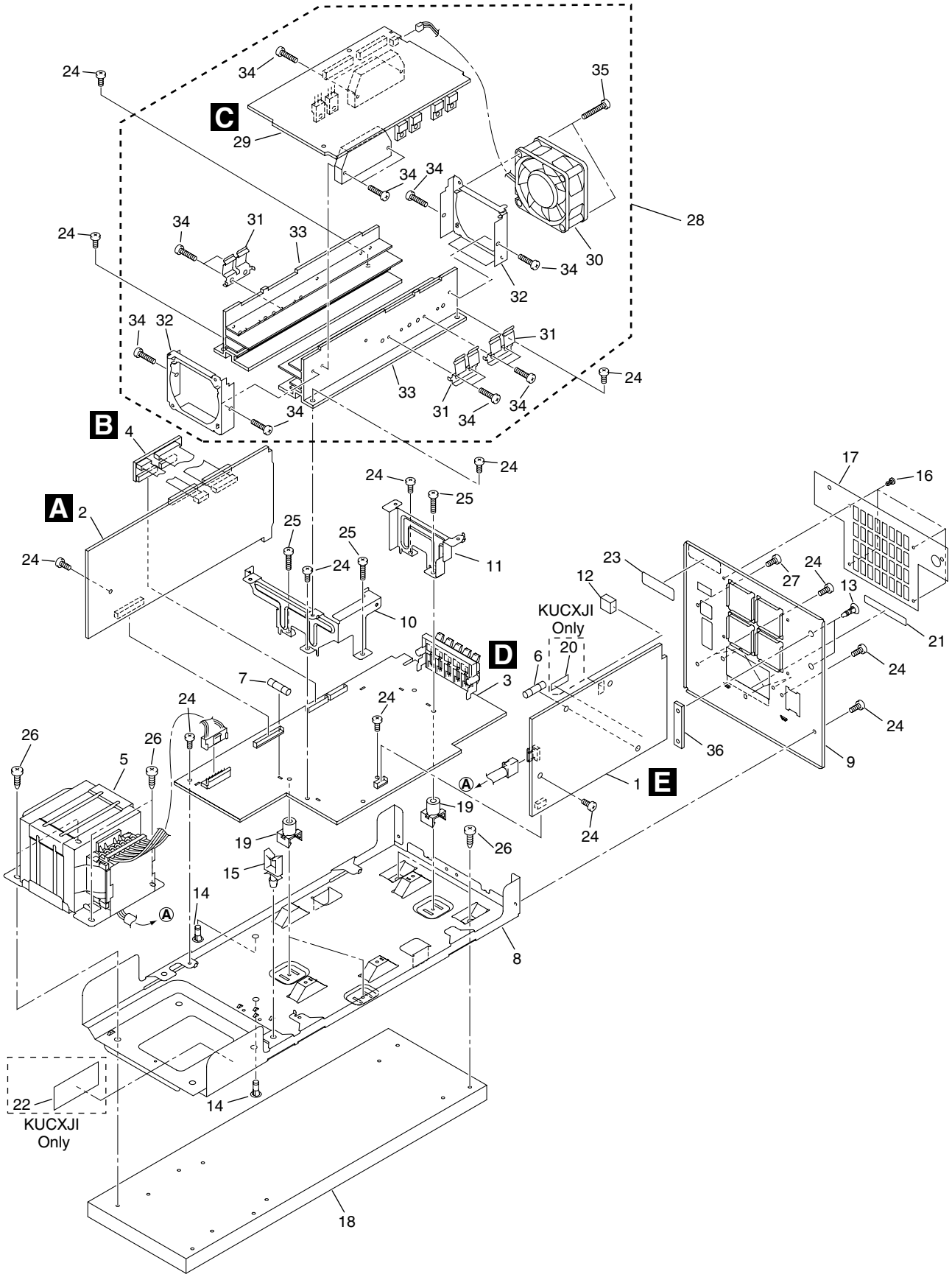
Mark	No.	Description	Part No.
NSP	1	Cabinet	See Contrast table (2)
NSP	2	Amplifier Ass'y	See Contrast table (2)
	3	Connecting Cord	SDF1095
	4	Packing	SEC1540
	5	Packing	SEC1634
NSP	6	Gasket	SEE1078
	7	Damper	SER1300
NSP	8	Stmped Serial Label	See Contrast table (2)
NSP	9	Duct Ring	SMR1339
NSP	10	Cosmetic Duct	See Contrast table (2)
NSP	11	Paper Tube 70	SMR1362
NSP	12	Acoustic Absorbent	SMV2077
NSP	13	Acoustic Absorbent	SMV2078
NSP	14	Acoustic Absorbent	SMV2079
NSP	15	Mesh	SNC1188
NSP	16	Sash	See Contrast table (2)
NSP	17	Cosmetic Baffle	See Contrast table (2)
	18	Transducer	T16EU92
	19	Screw	BPZ40P120FZB
	20	Screw	See Contrast table (2)
	21	Screw	BYC40P160FZB
	22	Screw	See Contrast table (2)
	23	Washer	See Contrast table (2)

(2) CONTRAST TABLE

S-DV1000SW/KUCXJI, MYXJI and NVXJI are constructed the same except for the following:

Mark	No.	Symbol and Description	S-DV1000SW/ KUCXJI	S-DV1000SW/ MYXJI	S-DV1000SW/ NVXJI
NSP	1	Cabinet	SMM1983	SMM1982	SMM1982
NSP	2	Amplifier Ass'y	AXX7133	AXX7132	AXX7140
NSP	8	Stmped Serial Label	SME3343	SME3333	SME3340
NSP	10	Cosmetic Duct	SMR1356	SMR1357	SMR1357
NSP	16	Sash	SNH1050	Not used	Not used
NSP	17	Cosmetic Baffle	SNK2613	SNK2614	SNK2614
	20	Screw	BPZ45P120FMC	Not used	Not used
	22	Screw	BYC40P200FZB	BYC40P180FZB	BYC40P180FZB
	23	Washer	WA43F090M080	Not used	Not used

2.3 AMPLIFIER ASSY



AMPLIFIER ASSY parts List

Mark	No.	Description	Part No.
	1	PRIMARY ASSY	See Contrast table (2)
	2	AF ASSY	AWU8005
	3	POWER ASSY	See Contrast table (2)
	4	TRADE 1 ASSY	AWU8028
⚠	5	Power Transformer	See Contrast table (2)
⚠	6	Fuse (FU1)	See Contrast table (2)
⚠	7	Fuse (FU4)	See Contrast table (2)
NSP	8	Chassis	ANA7109
	9	Rear Panel	See Contrast table (2)
	10	HS Holder F	ANG7439
	11	HS Holder R	ANG7440
	12	Cushion B	AEB7290
	13	Spacer	AEC1360
	14	Card Spacer	AEC7133
	15	Wire Saddel	AEC7297
	16	Nylon Rivet	AEC7318
	17	Fan Cover	AEC7427
	18	Wood Base	AMM7006
NSP	19	PCB Mould	AMR1525
NSP	20	Fuse Card	See Contrast table (2)
NSP	21	SP Label	AAX7956
	22	65 Label	See Contrast table (2)
NSP	23	Serial Paper	RRW-168
	24	Screw	BBZ30P080FMC
	25	Screw	BBZ30P200FMC
	26	Screw	BYC40P140FMC
	27	Screw	PSC30P080FNI
NSP	28	AMP MODULE 6CH	AXQ7242
	29	6CH AMP ASSY	AWM7720
	30	DC Fan Motor	AXM7025
	31	FET Bracket	ANG7418
	32	Fan Plate	ANG7425
	33	Heat Sink	ANH7161
	34	Screw	BBZ30P140FMC
	35	Screw	BBZ30P300FZK
NSP	36	USE ASSY	•••••

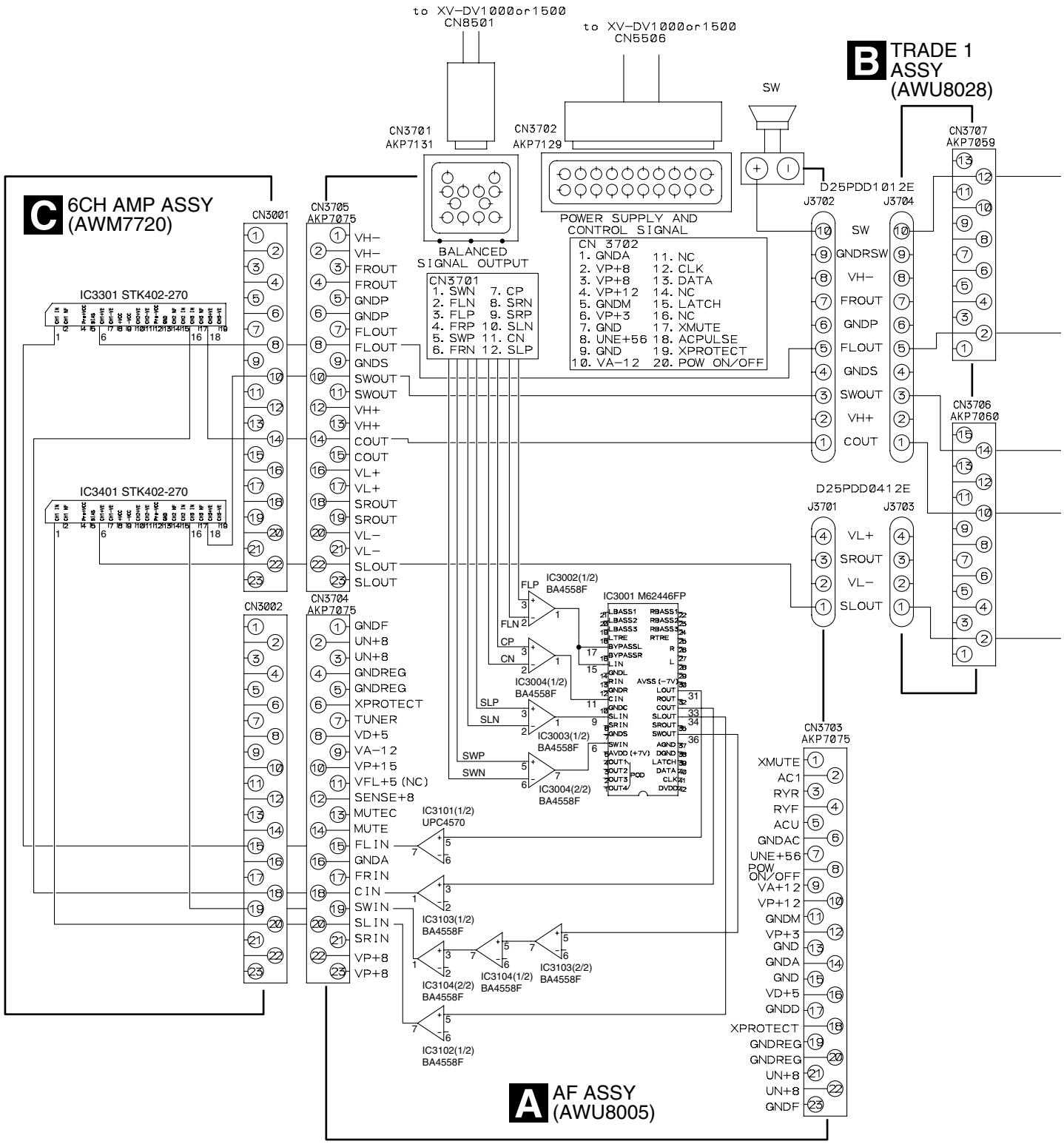
(2) CONTRAST TABLE

S-DV1000SW/KUCXJI, MYXJI and NVXJI are constructed the same except for the following:

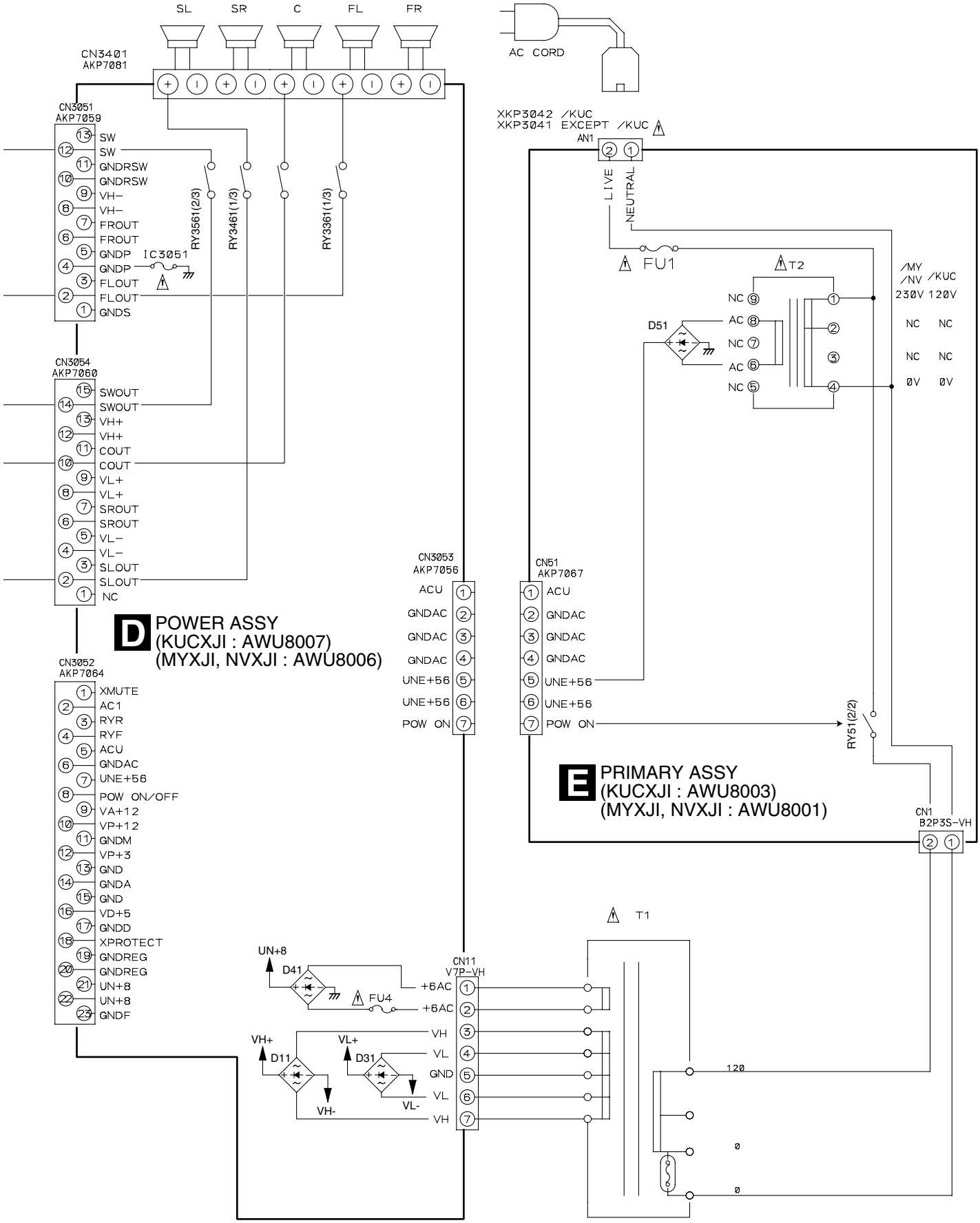
Mark	No.	Symbol and Description	S-DV1000SW/ KUCXJI	S-DV1000SW/ MYXJI	S-DV1000SW/ NVXJI
	1	PRIMARY ASSY	AWU8003	AWU8001	AWU8001
	3	POWER ASSY	AWU8007	AWU8006	AWU8006
⚠	5	Power Transformer	ATS7342	ATS7341	ATS7341
⚠	6	Fuse (FU1 : 6.3A)	REK1069	Not used	Not used
⚠	6	Fuse (FU1 : T3.15A)	Not used	REK1027	REK1027
⚠	7	Fuse (FU4 : 6.3A)	REK1069	Not used	Not used
⚠	7	Fuse (FU4 : T5A)	Not used	REK1029	REK1029
	9	Rear Panel	ANC8113	ANC8112	ANC8131
NSP	20	Fuse Card	AAX2374	Not used	Not used
	22	65 Label	ARW7050	Not used	Not used

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

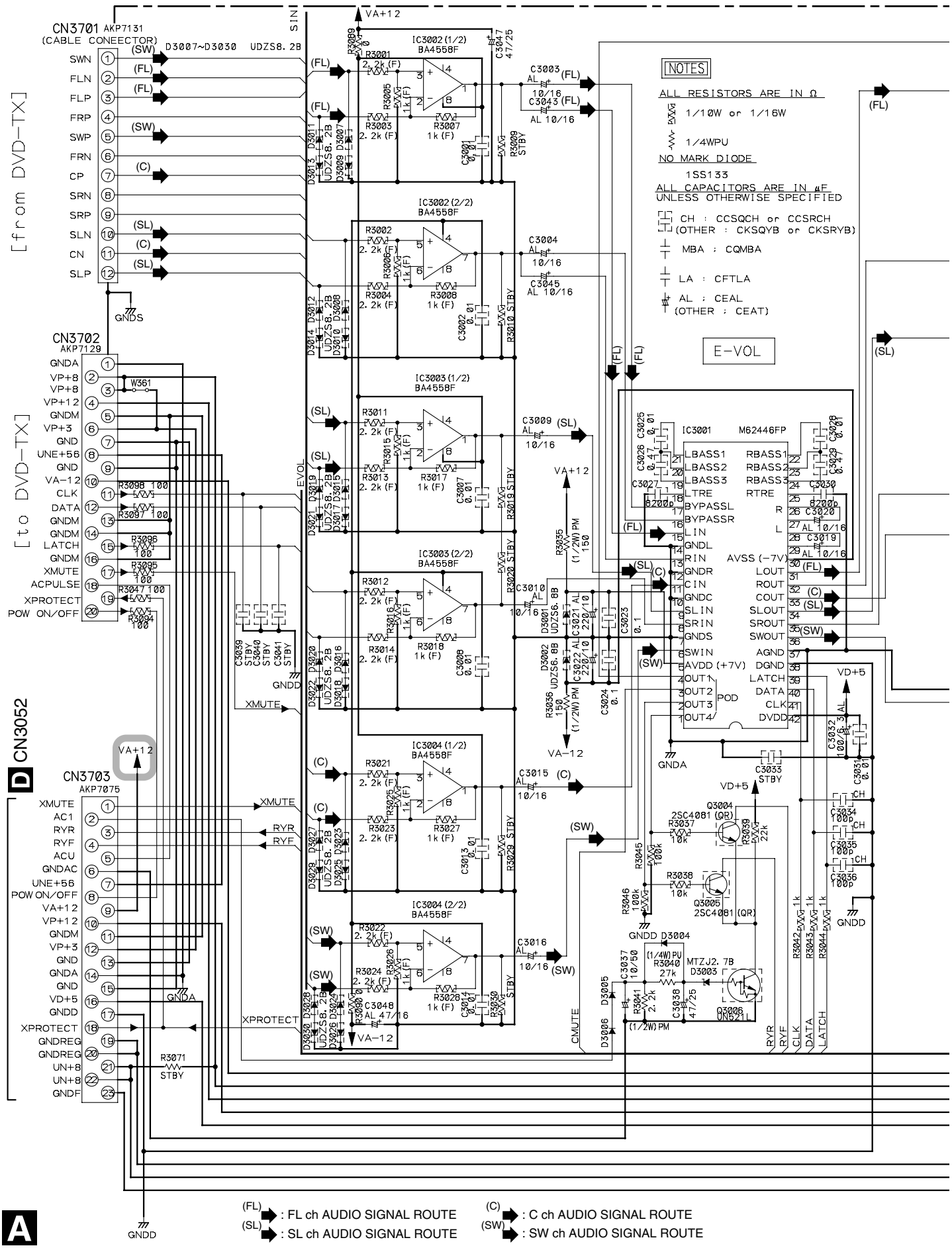
3.1 BLOCK DIAGRAM AND OVERALL CONNECTION DIAGRAM

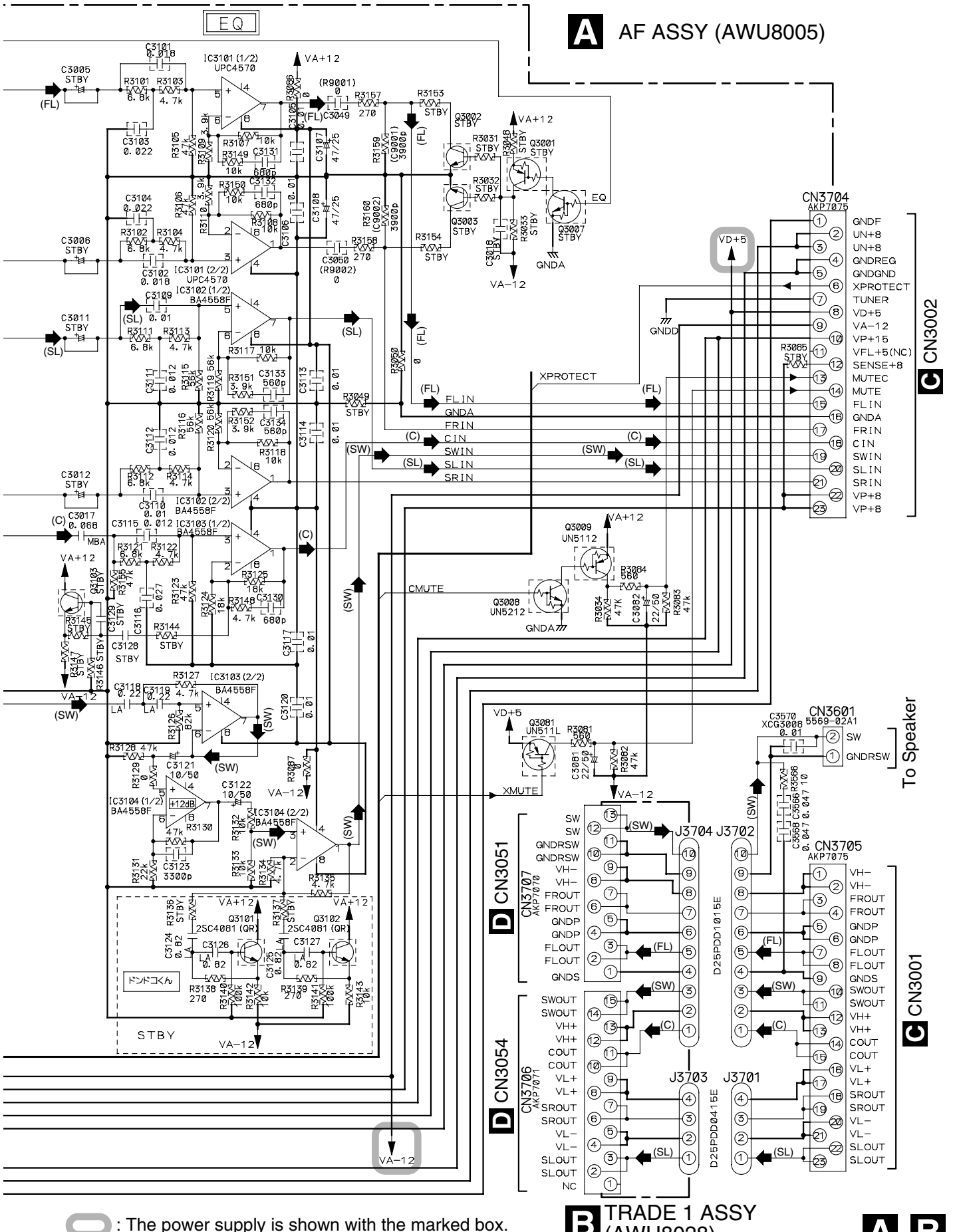


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

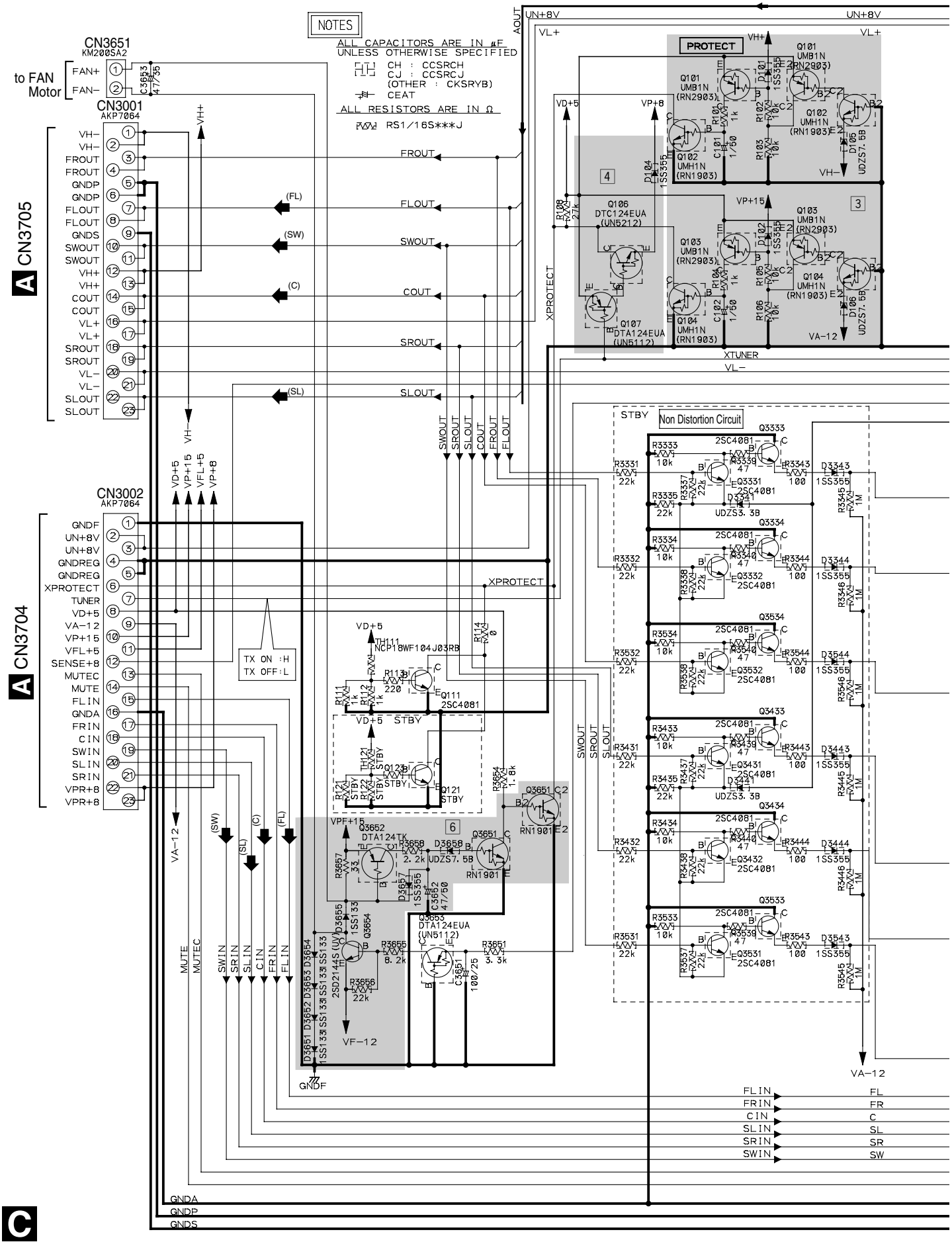


3.2 AF and TRADE 1 ASSY

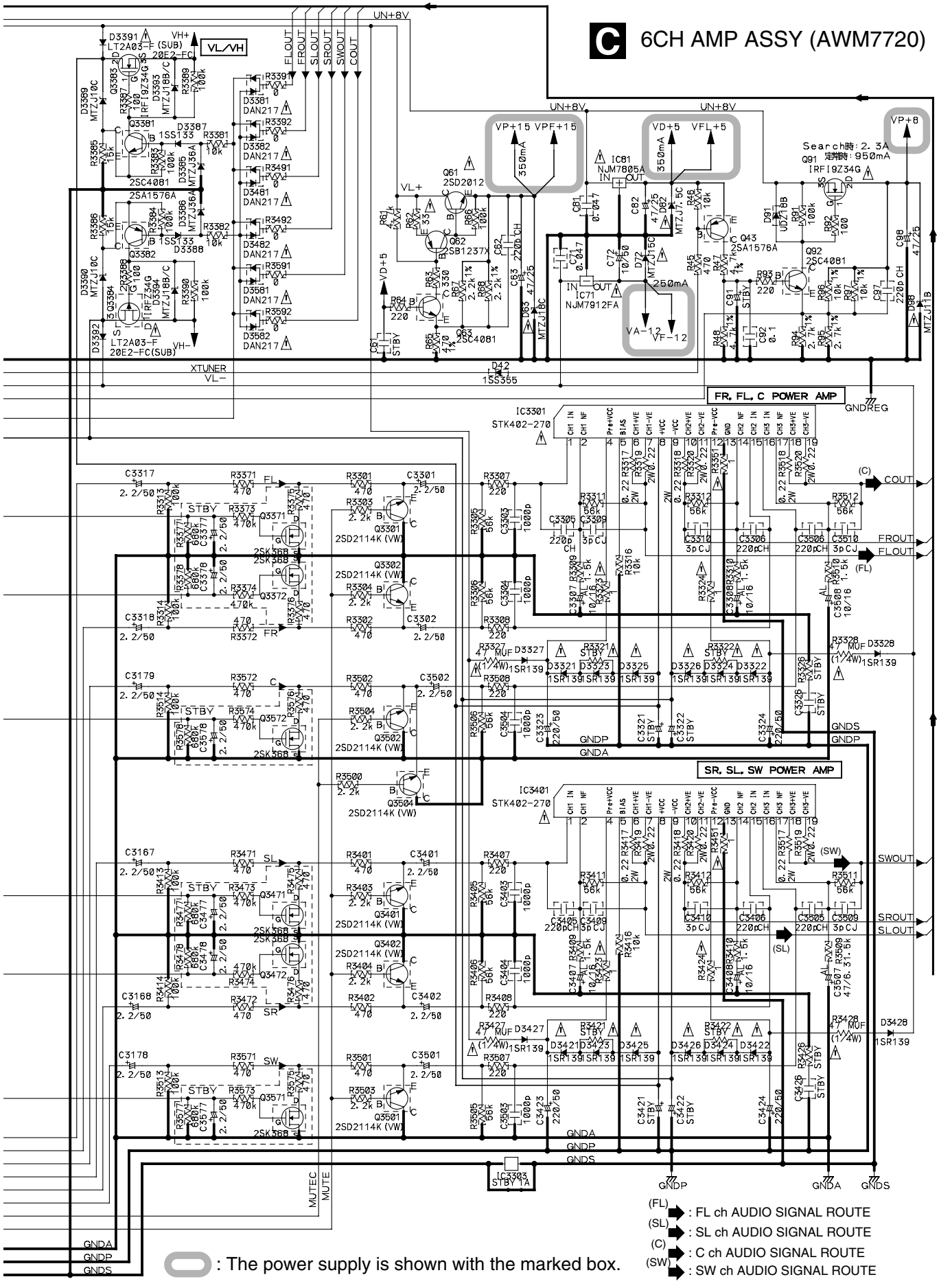



A AF ASSY (AWU8005)
EQ
IC3101 (1/2) UPC4570
IC3101 (2/2) UPC4570
IC3102 (1/2) BA4558F
IC3102 (2/2) BA4558F
IC3103 (1/2) BA4558F
IC3103 (2/2) BA4558F
IC3104 (1/2) BA4558F
IC3104 (2/2) BA4558F
Q3001 STBY
Q3002 STBY
Q3003 STBY
Q3007 STBY
Q3009 UN5112
Q3008 UN5212
Q3081 UN511L
Q3101 2SC4081 (QR)
Q3102 2SC4081 (QR)
VA+12
VA−12
VD+5
GNDA
GNDD
XPROTECT
CMUTE
XMUTE
FLIN
GNDA
FRIN
CIN
SWIN
SLIN
SRIN
CN3704 AKP7075
GNDF
UN+8
UN+8
GNDREG
GNDGND
XPROTECT
TUNER
VD+5
VA−12
VP+15
VFL+5(NC)
SENSE+8
MUTEC
MUTE
FLIN
GNDA
FRIN
CIN
SWIN
SLIN
SRIN
VP+8
VP+8
C CN3002
CN3601 5569−02A1
SW
GNDRSW
To Speaker
CN3705 AKP7075
VH−
VH−
FROUT
FROUT
GNDP
GNDP
FLOUT
FLOUT
GNDS
SWOUT
SWOUT
VH+
VH+
COUT
COUT
VL+
VL+
SROUT
SROUT
VL−
VL−
SLOUT
SLOUT
C CN3001
D CN3051
CN3707 AKP7070
D CN3054
CN3706 AKP7071
J3704 J3702
J3703 J3701
D25PDD1015E
D25PDD0415E
STBY
B TRADE 1 ASSY (AWU8028)
: The power supply is shown with the marked box.

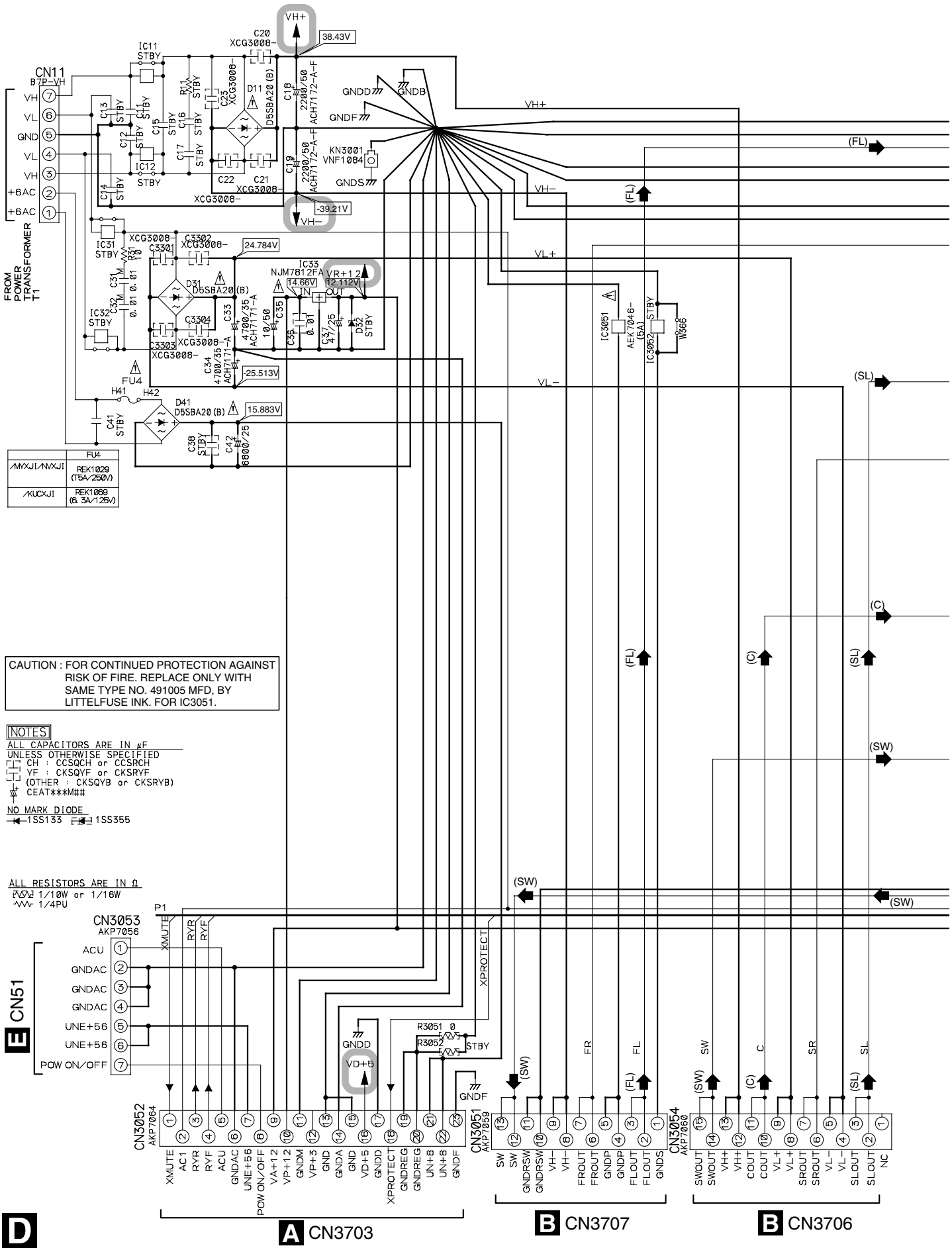
3.3 6CH AMP ASSY



C 6CH AMP ASSY (AWM7720)



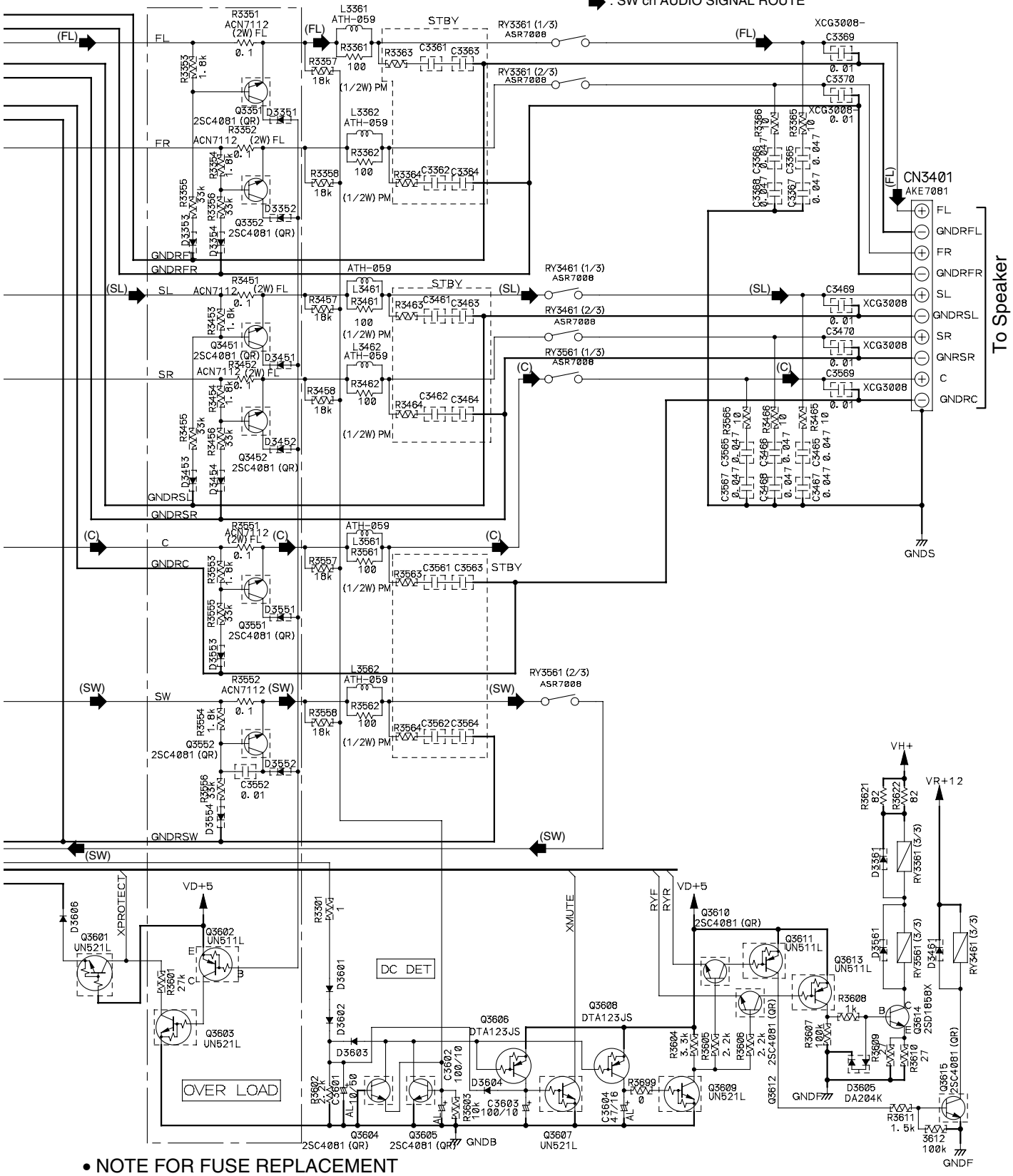
3.4 POWER ASSY



D POWER ASSY
(KUCXJI : AWU8007)
(MYXJI, NVXJI : AWU8006)

: The power supply is shown with the marked box.

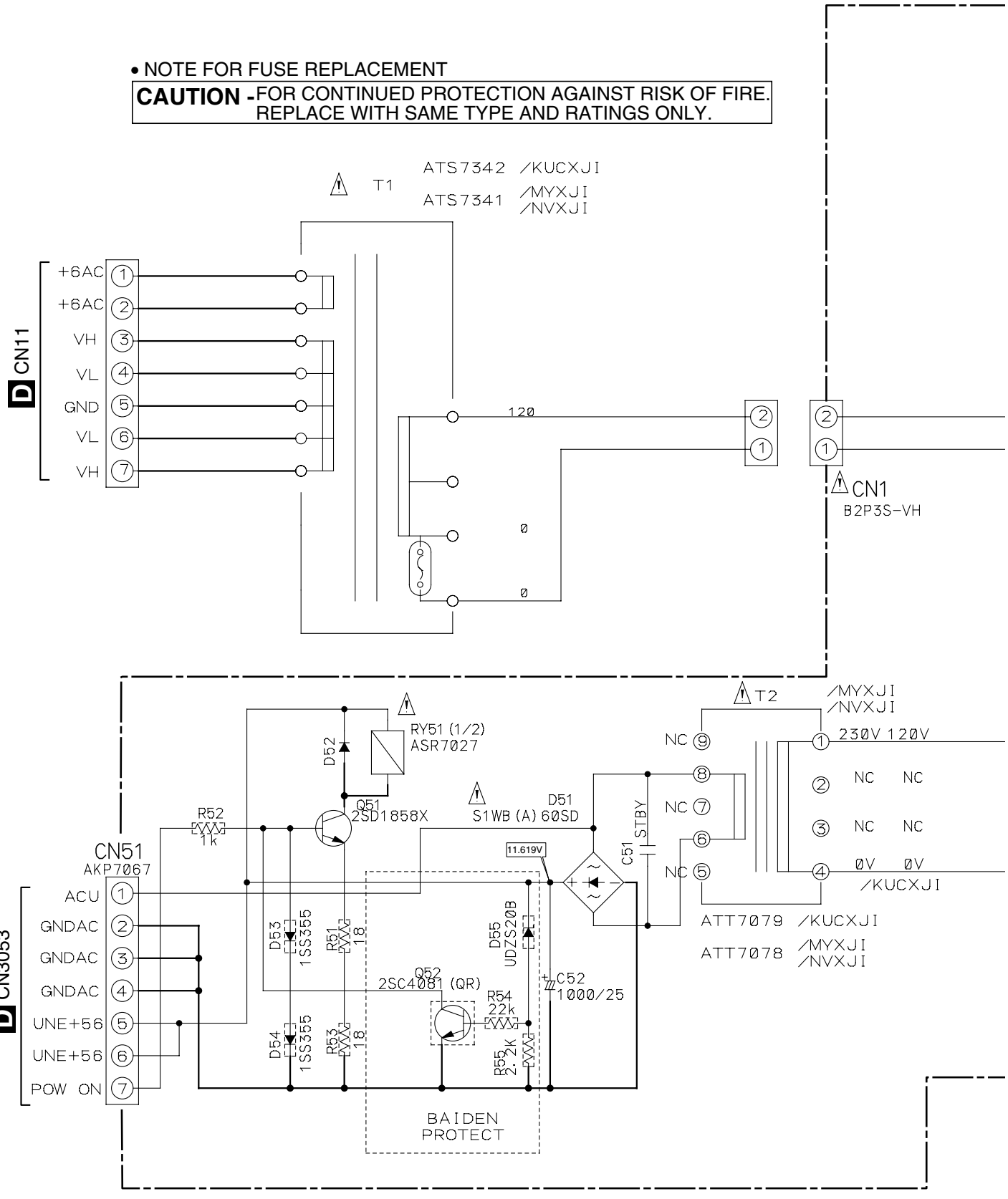
(FL) : FL ch AUDIO SIGNAL ROUTE
(SL) : SL ch AUDIO SIGNAL ROUTE
(C) : C ch AUDIO SIGNAL ROUTE
(SW) : SW ch AUDIO SIGNAL ROUTE

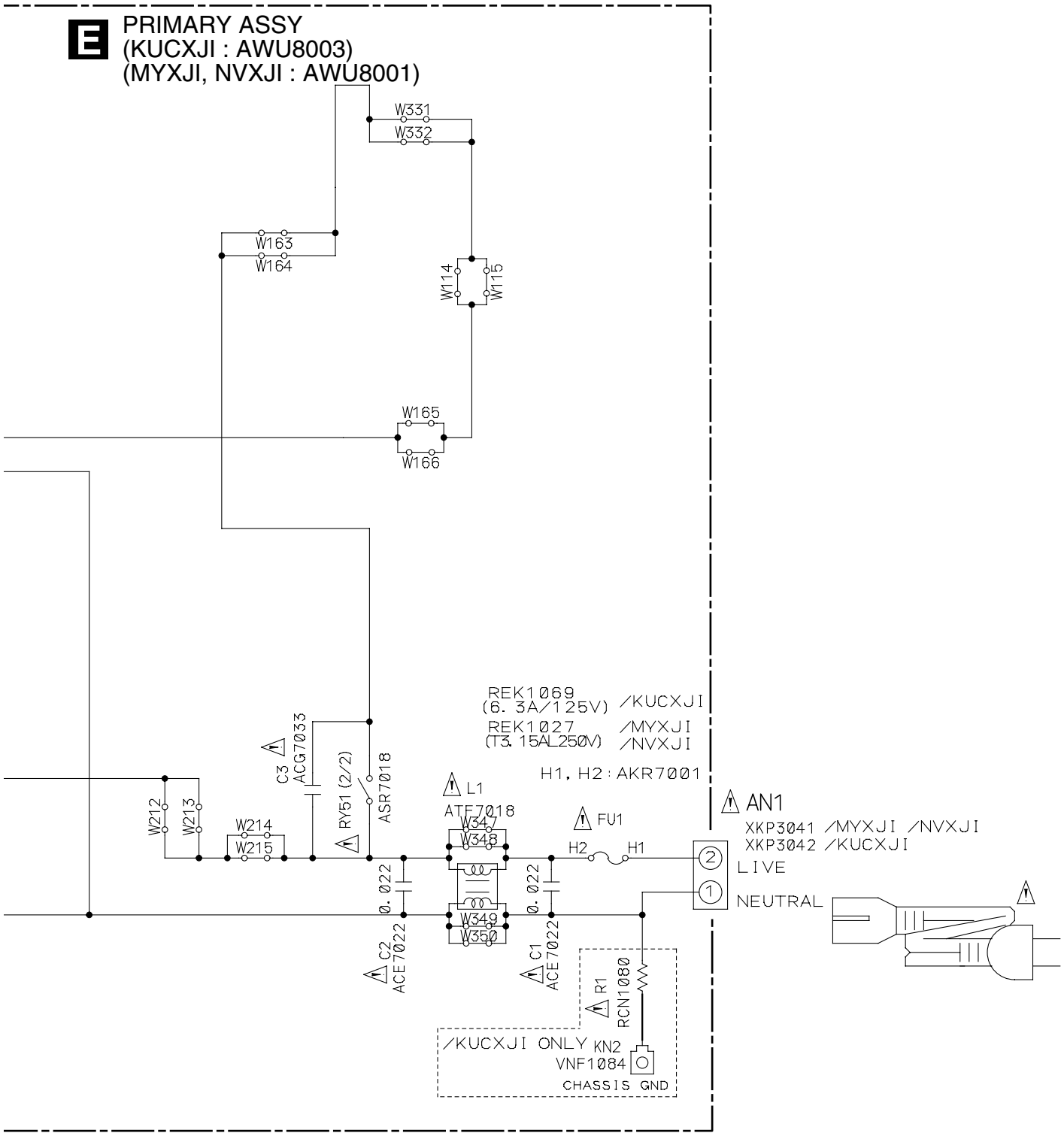


• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.5 PRIMARY ASSY





NOTES

ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED

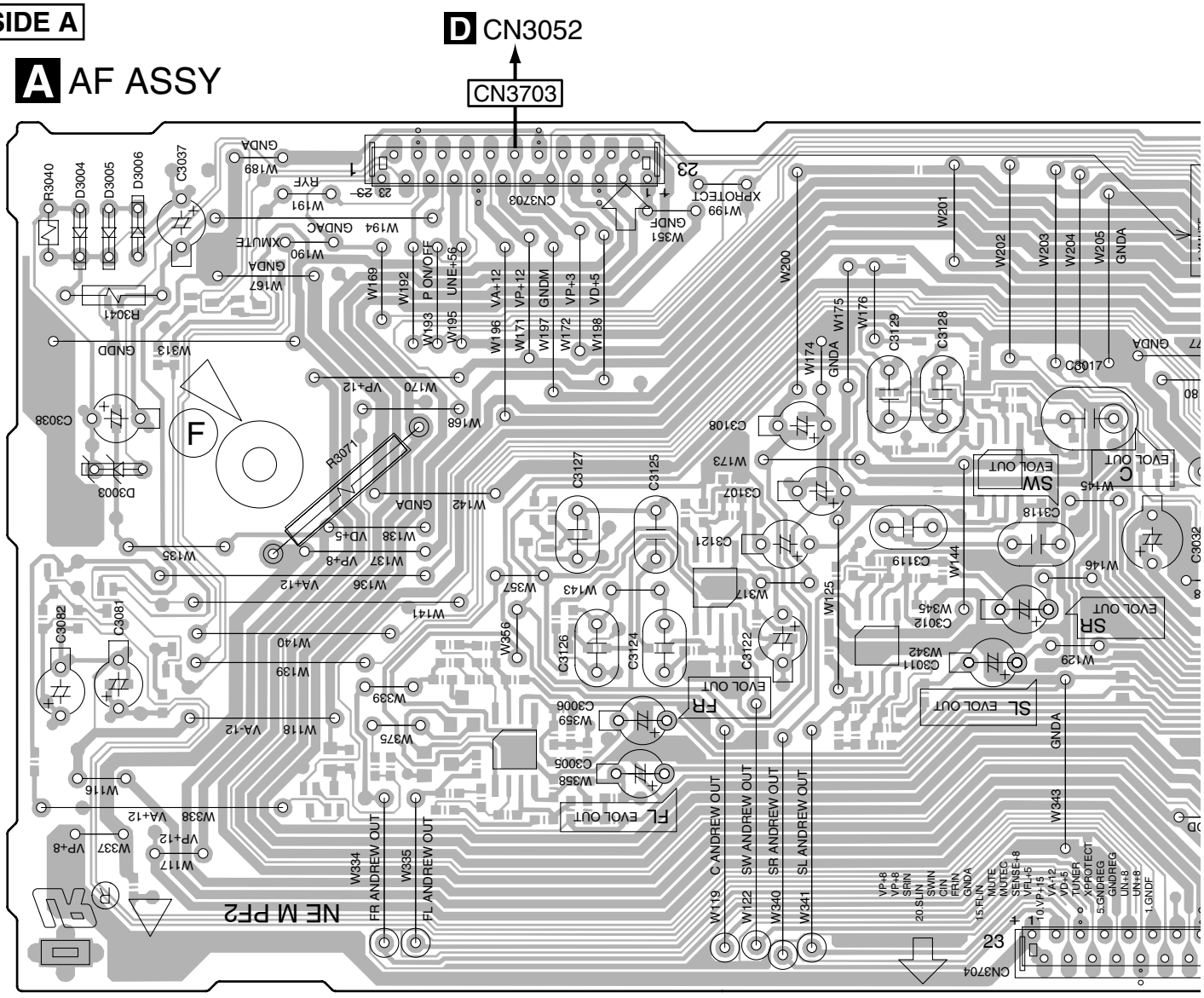
TY : CFTYA
CEAT***M##
: CKSRYB**
: 1SS133
: RS1/16S

E

4. PCB CONNECTION DIAGRAM
4.1 AF and TRADE 1 ASSY

SIDE A

A AF ASSY

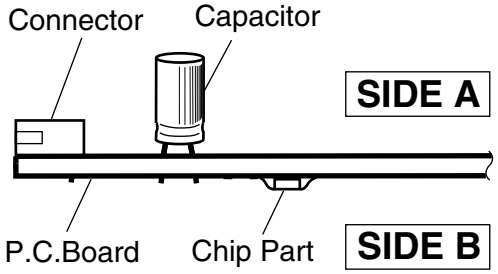


NOTE FOR PCB DIAGRAMS :

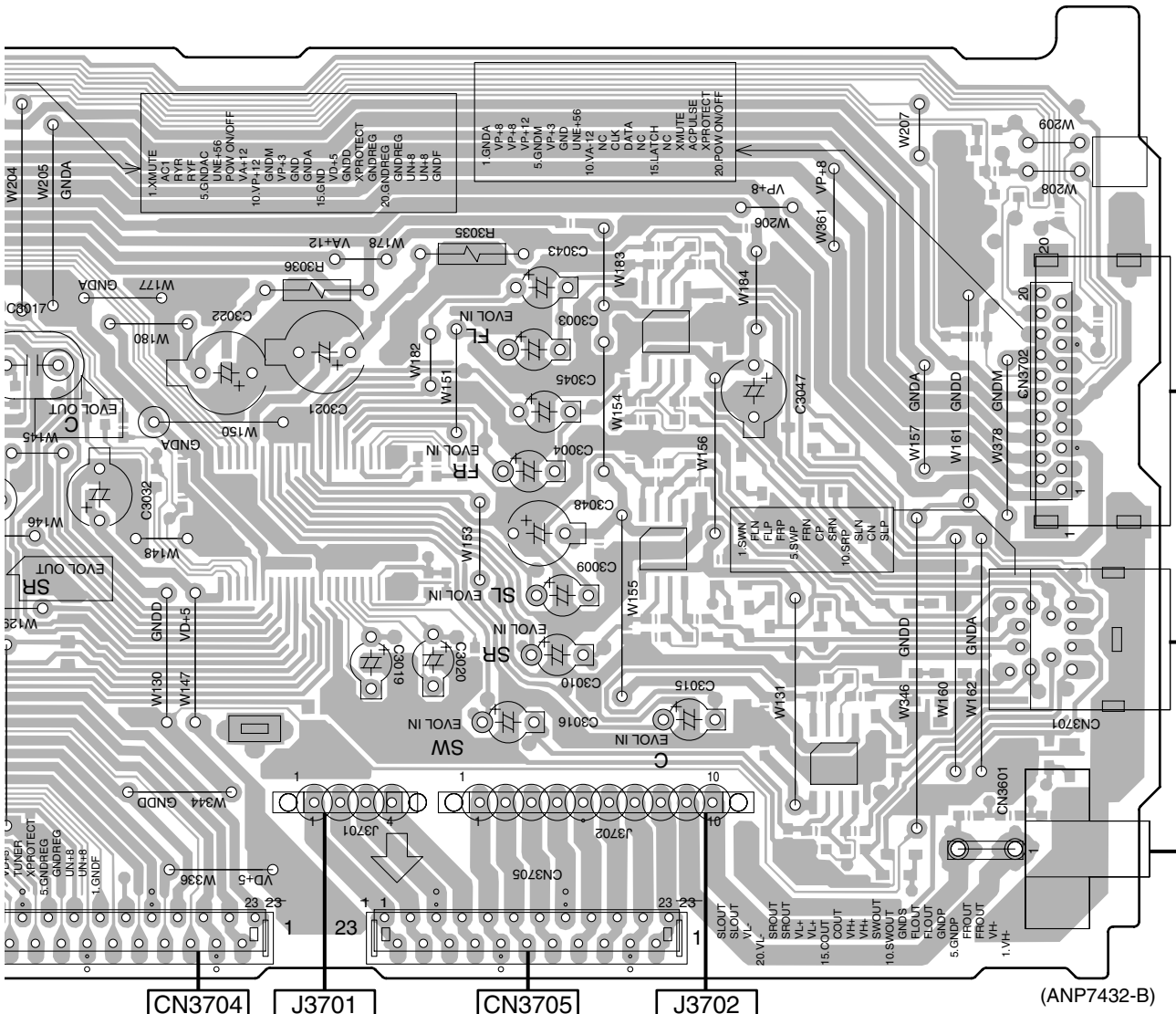
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



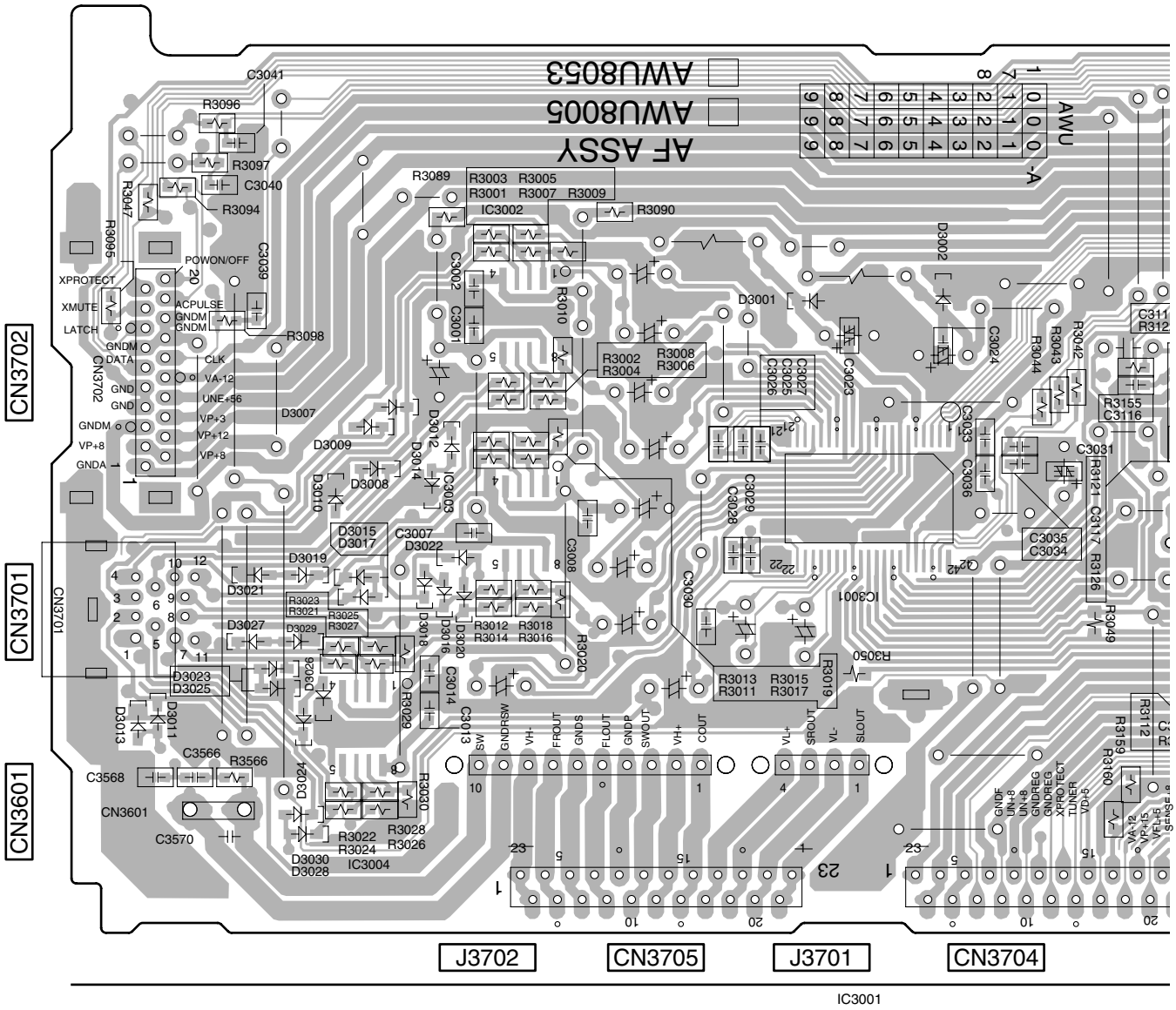
SIDE A


CN3702
To XV-DV1000
CN3701
To XV-DV1000
CN3601
To Subwoofer
(ANP7432-B)
CN3704
J3701
CN3705
J3702
B CN3002
B CN3001
J3703
J3704
B TRADE 1 ASSY
AWU8028
TRADE ASSY
CN3706
CN3707
D CN3054
D CN3051

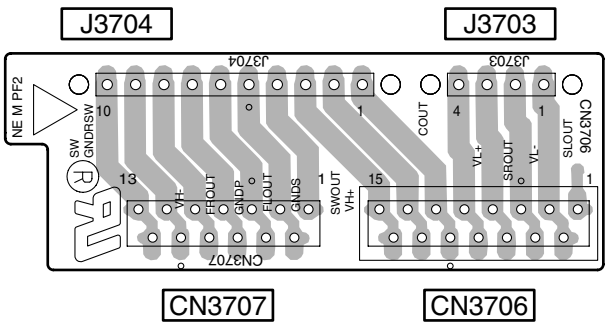
A B

SIDE B

A AF ASSY



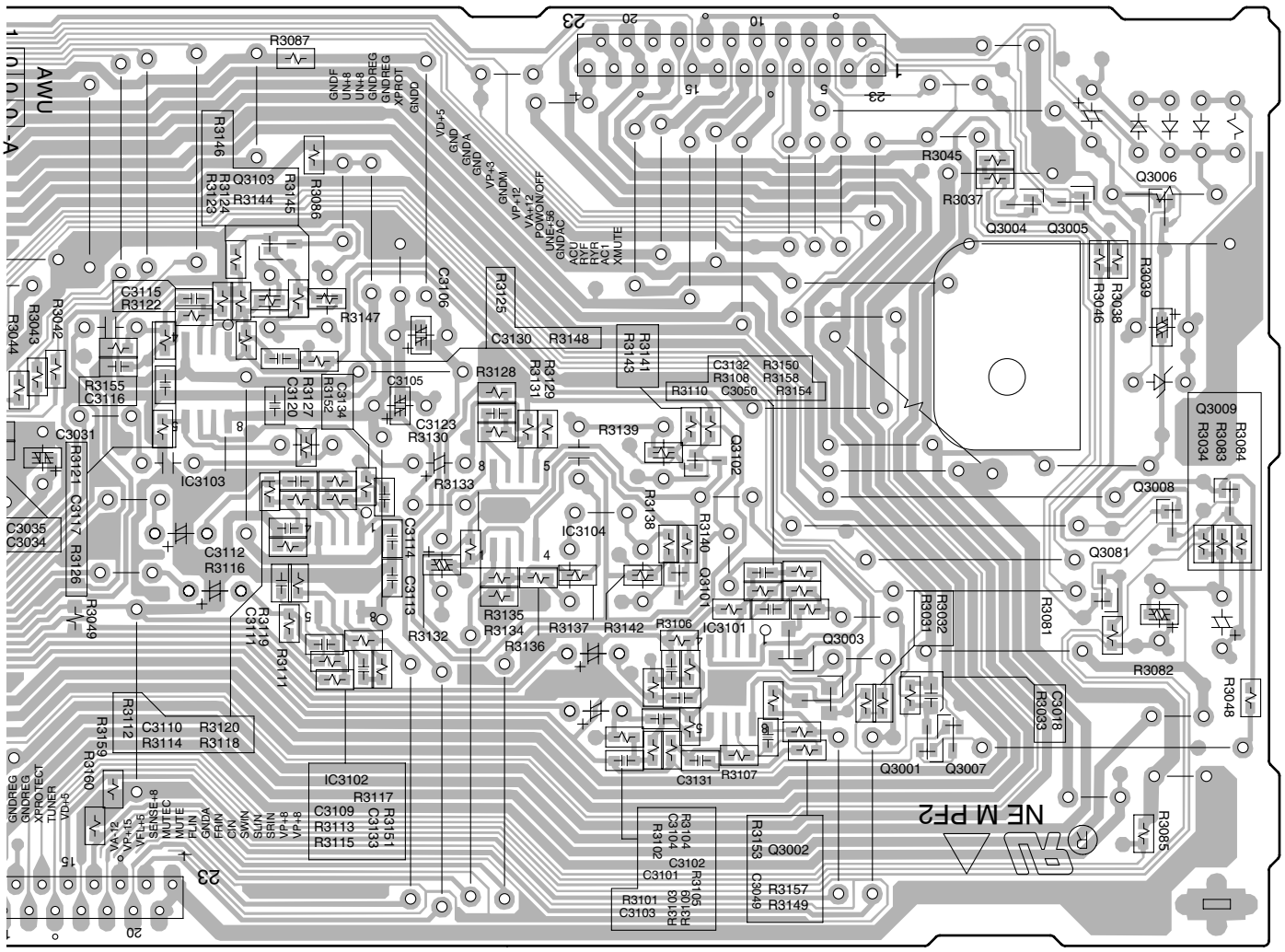
B TRADE 1 ASSY



A B

SIDE B

CN3703



(ANP7432-B)

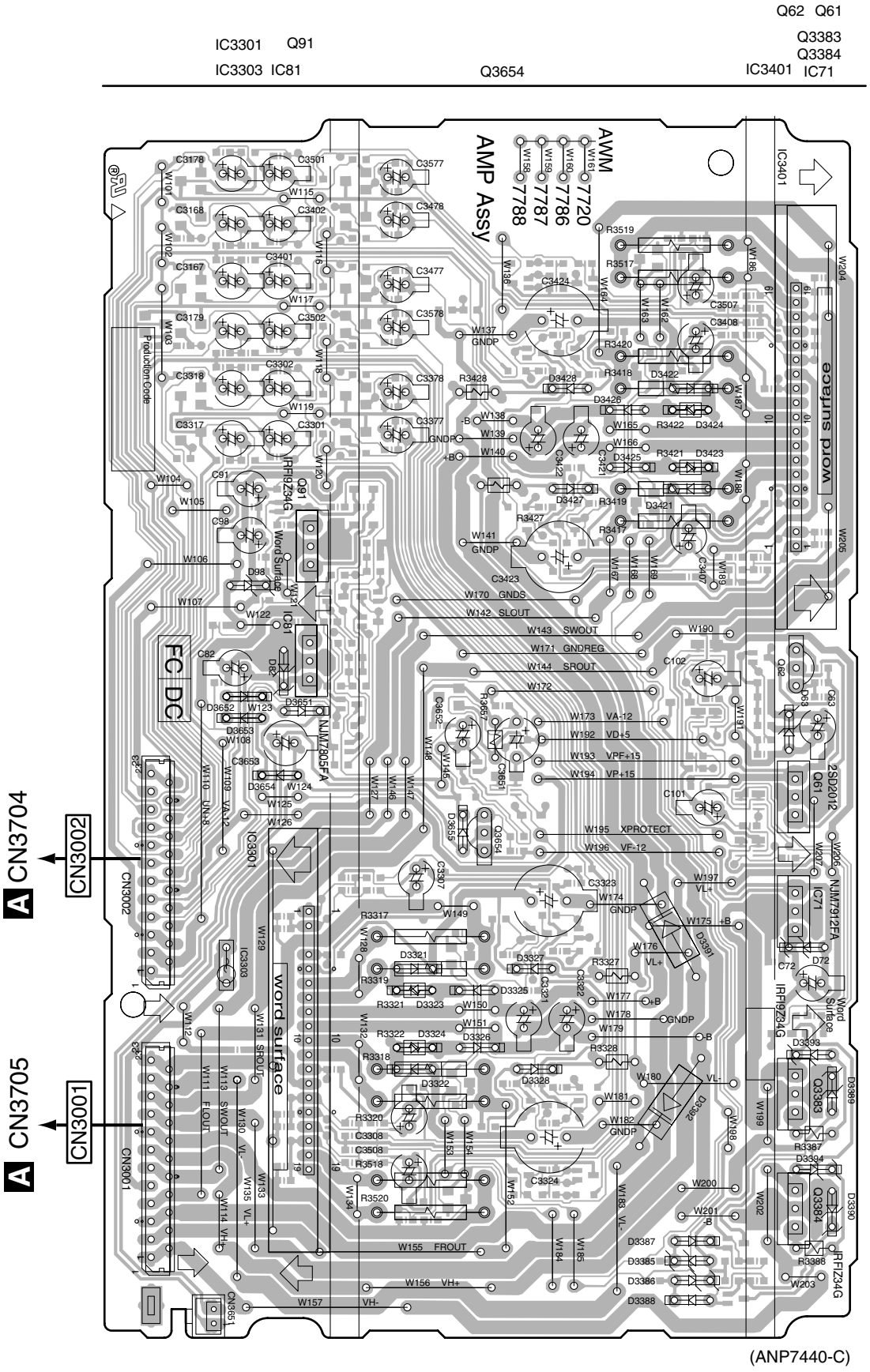
IC3103 IC3102 IC3104 Q3101 IC3101 Q3002 Q3003 Q3001 Q3007 Q3004 Q3005 Q3081 Q3008 Q3006 Q3009

4.2 6CH AMP ASSY

SIDE A

C 6CH AMP ASSY

SIDE A



(ANP7440-C)

C

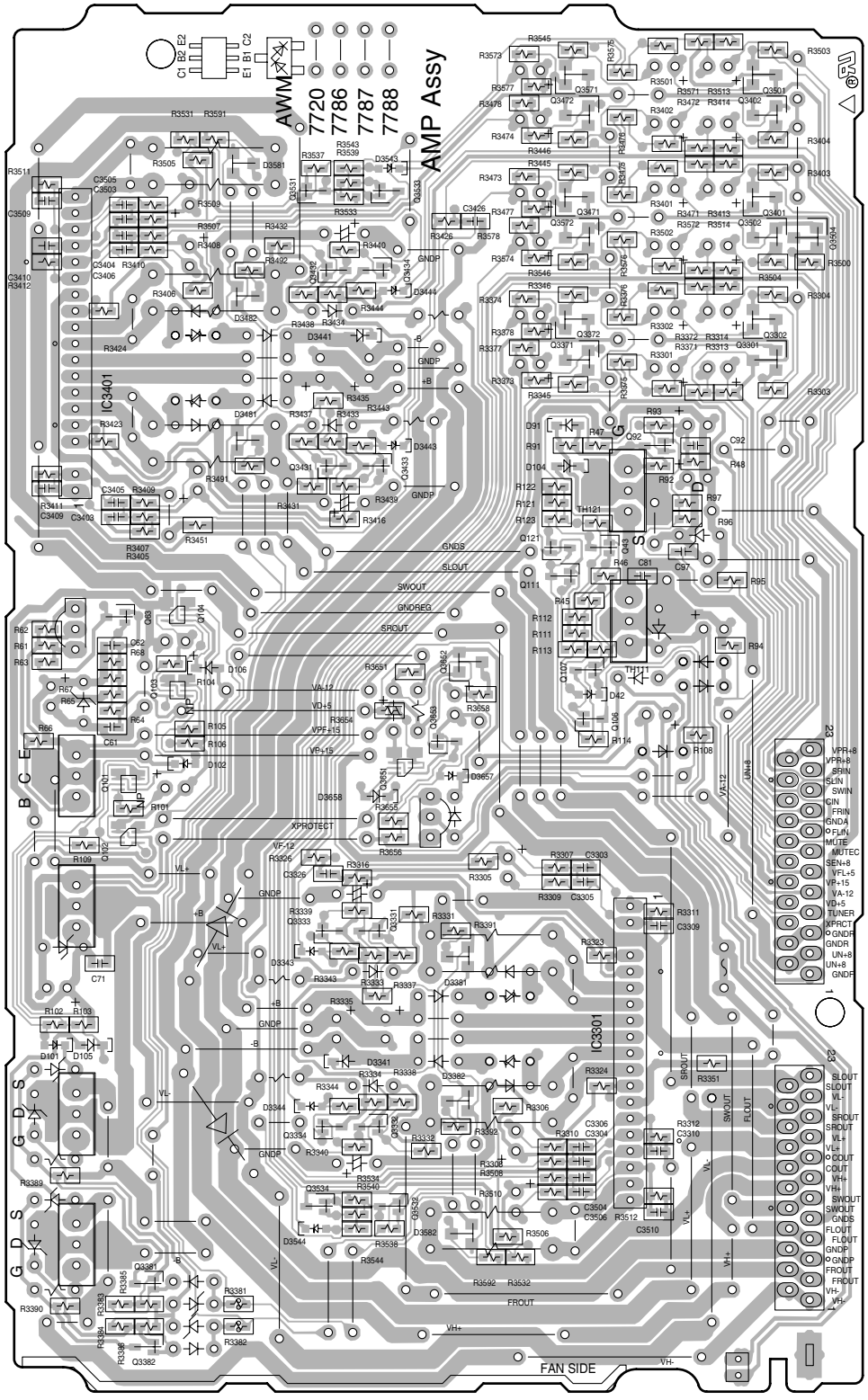
C

SIDE B

C 6CH AMP ASSY

SIDE B

Q101 Q63 Q3333 Q3331 Q3533 Q3572 Q3402
Q102 Q3381 Q3334 Q3332 Q3653 Q121 Q3471 Q3401
Q103 Q3534 Q3532 Q3371 Q3372 Q92 Q3502
Q3382 Q104 Q3432 Q3651 Q3652 Q111 Q107 Q106 Q43 Q3301 Q3302 Q3504

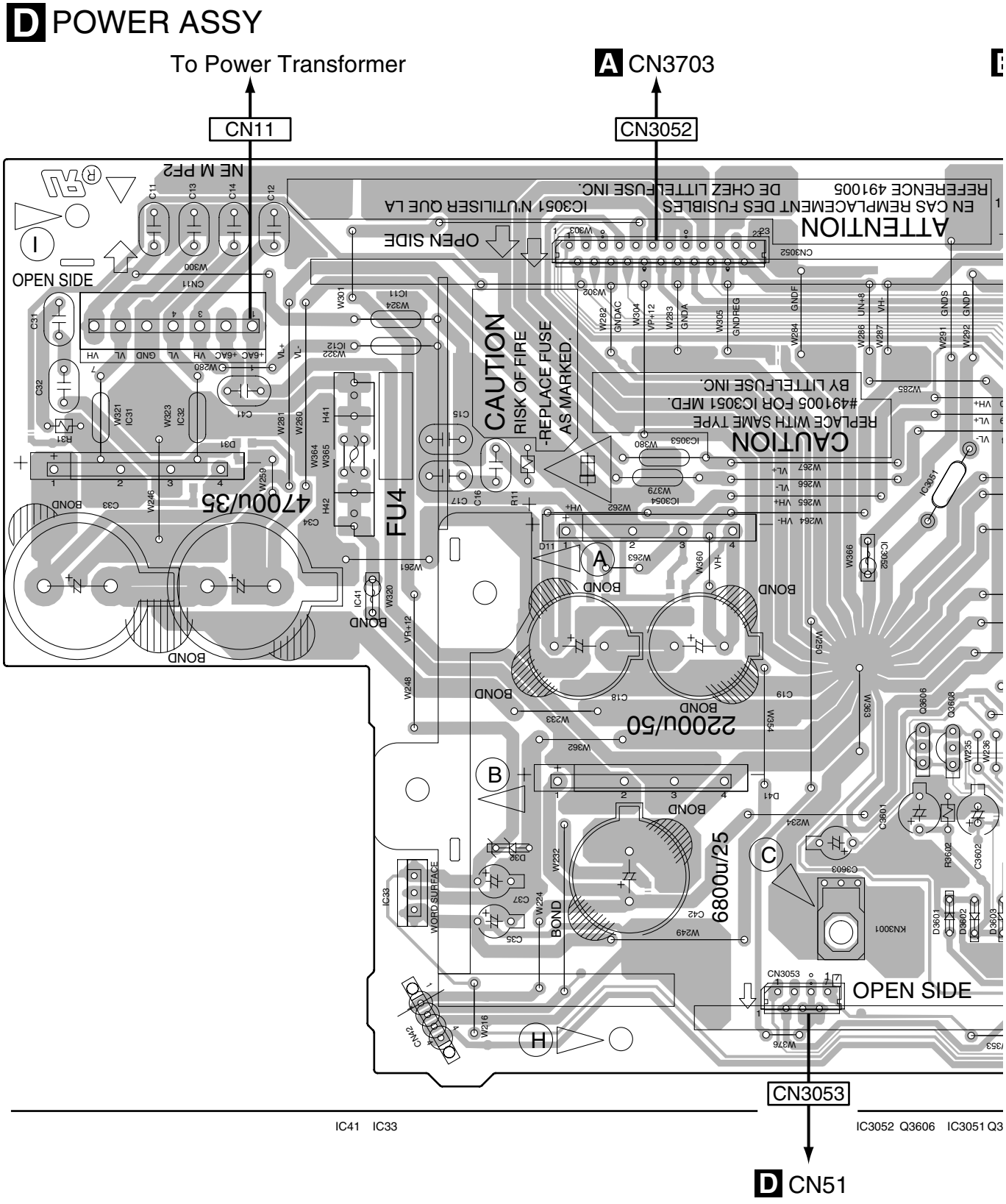


(ANP7440-C)

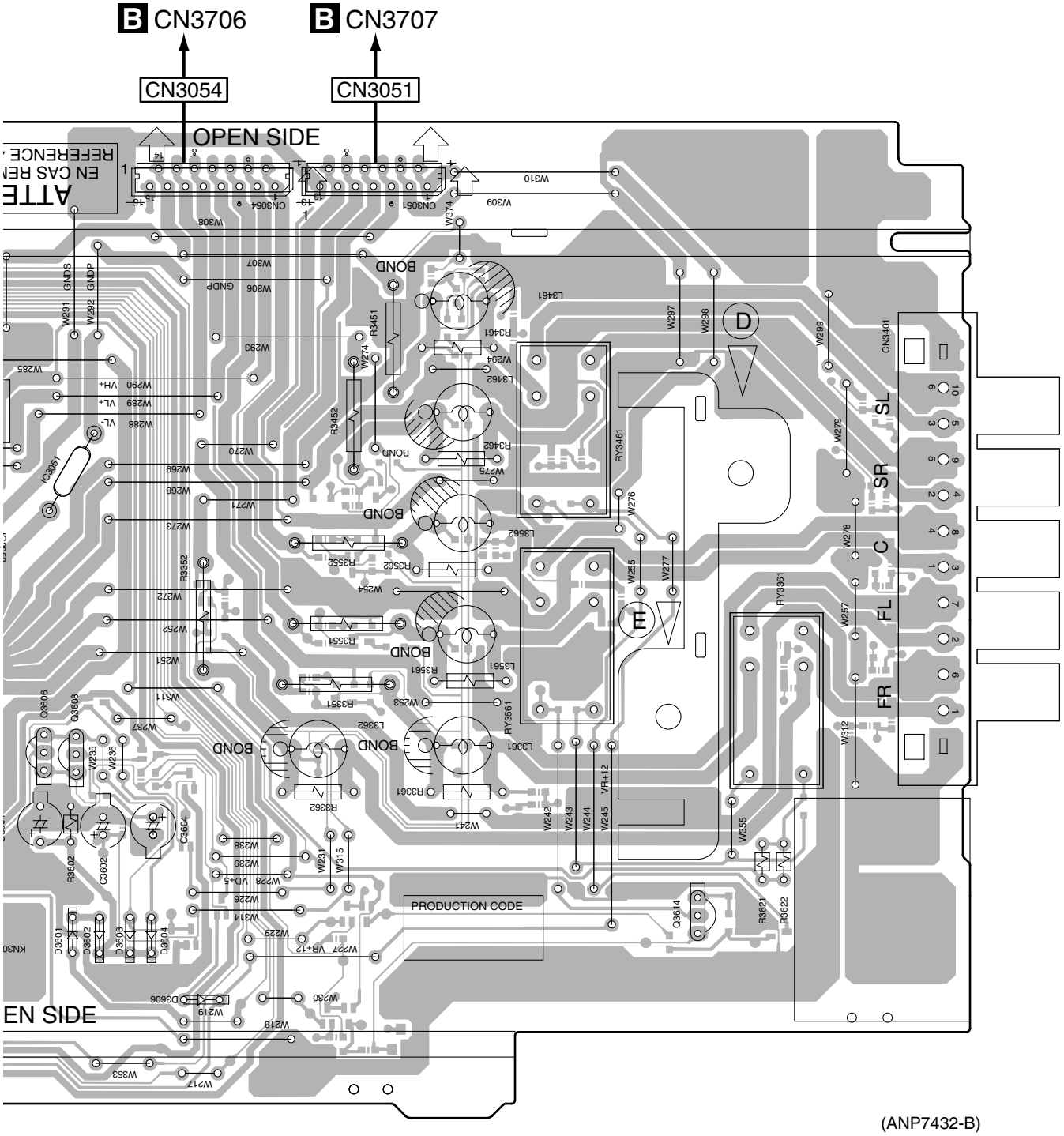
C C

4.3 POWER ASSY

SIDE A



SIDE A

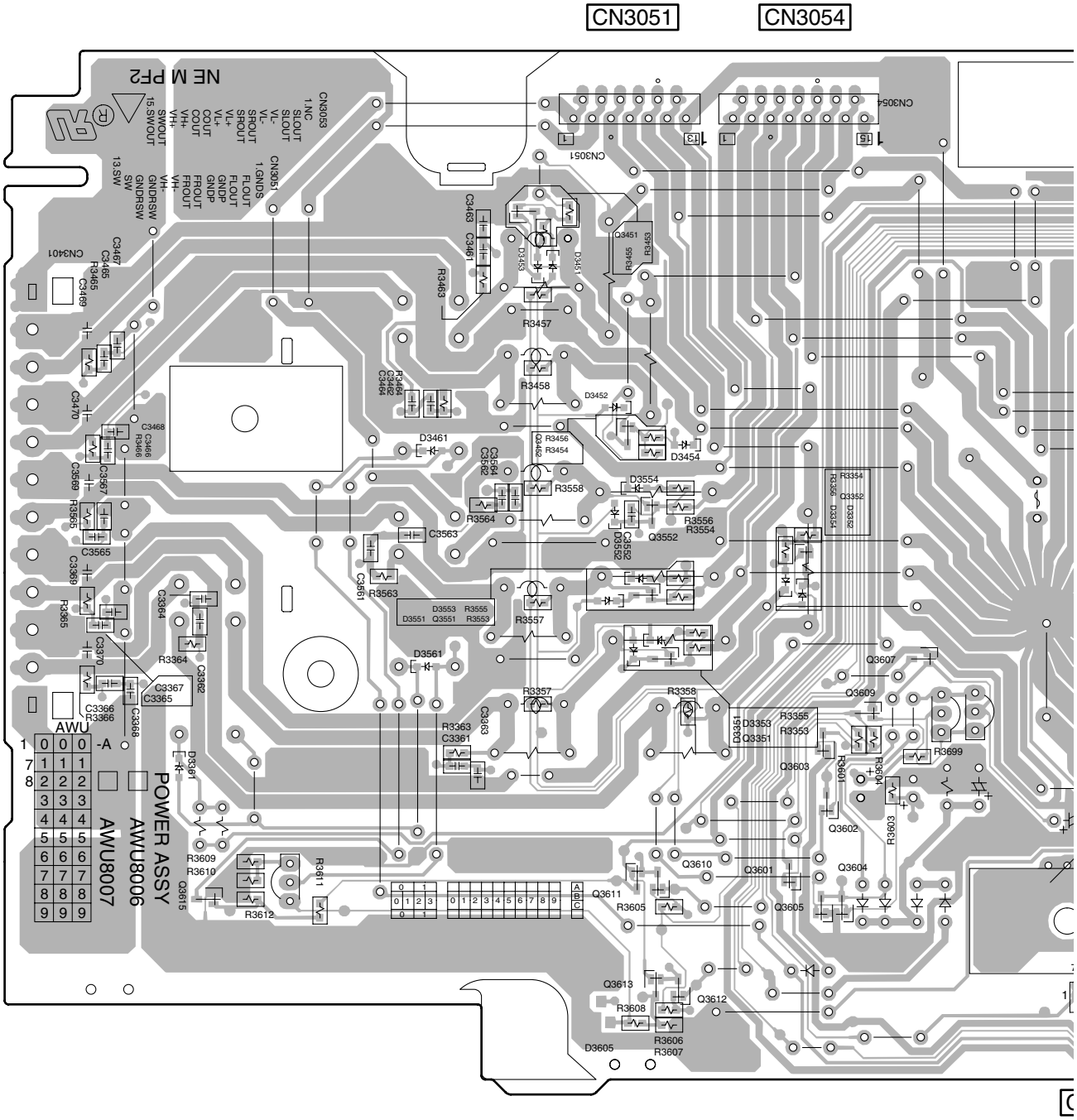


(ANP7432-B)

52 Q3606 IC3051 Q3608 Q3614

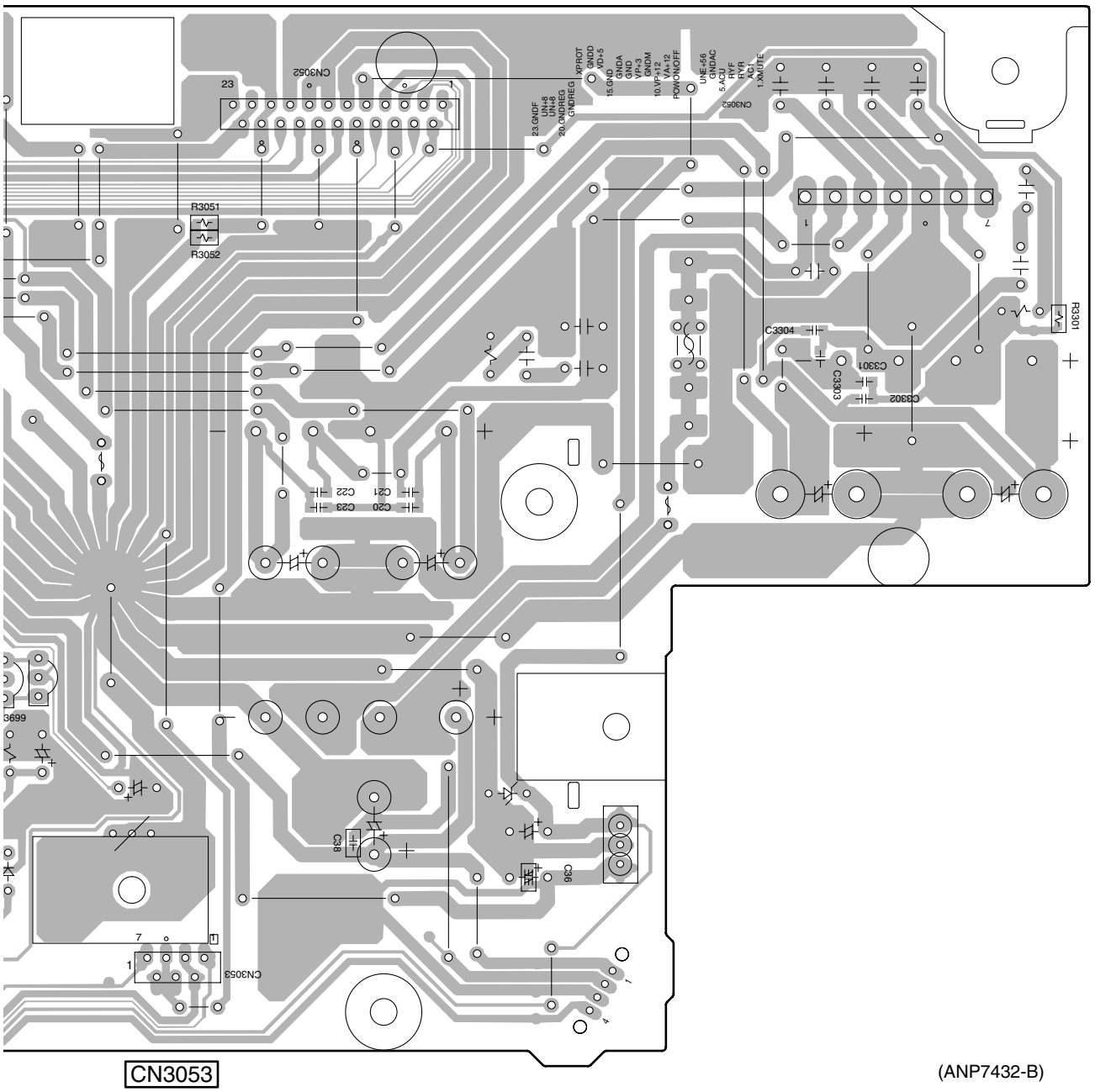
SIDE B

D POWER ASSY



SIDE B

CN3052 CN11



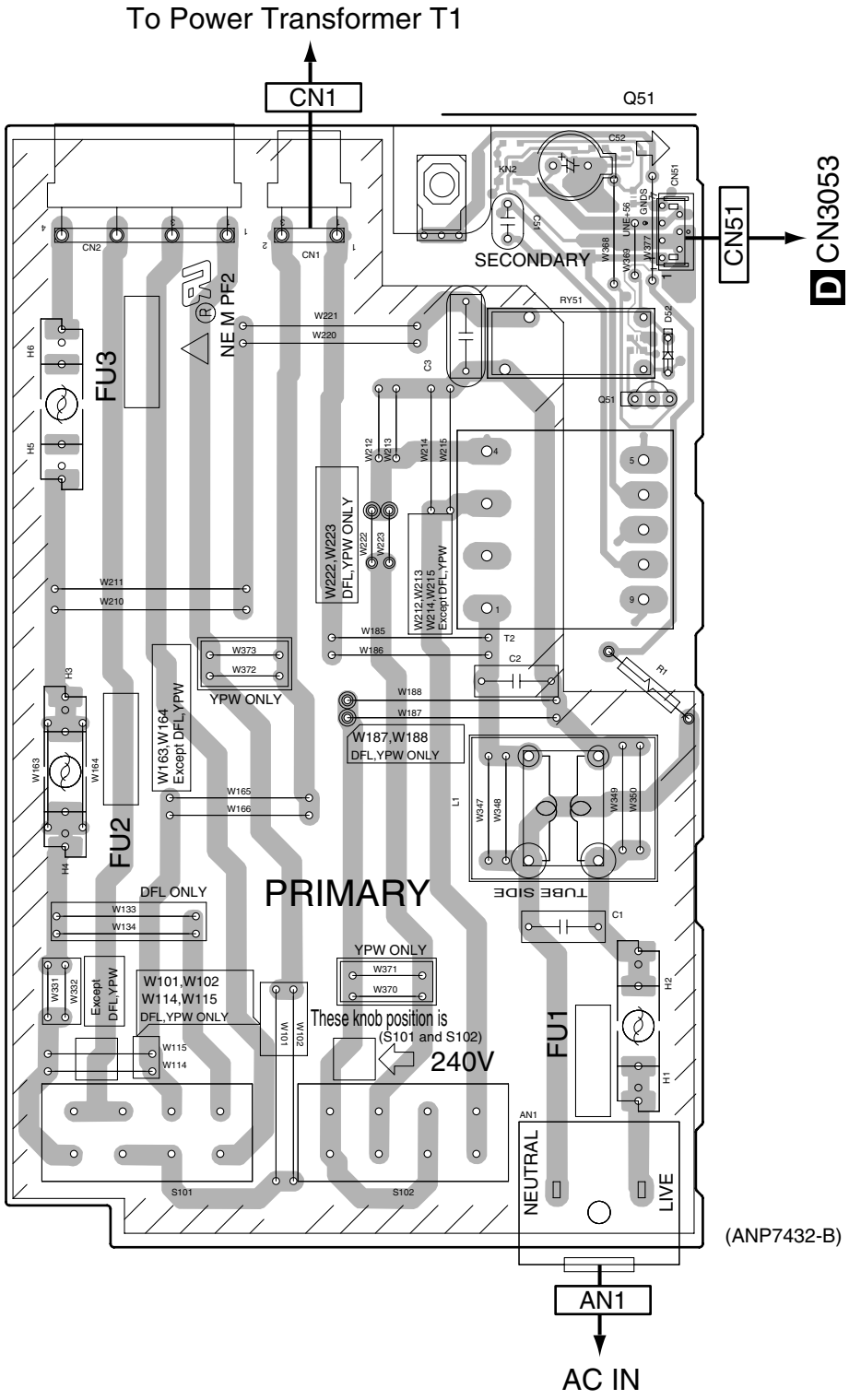
CN3053

(ANP7432-B)

4.4 PRIMARY ASSY

SIDE A **SIDE A**

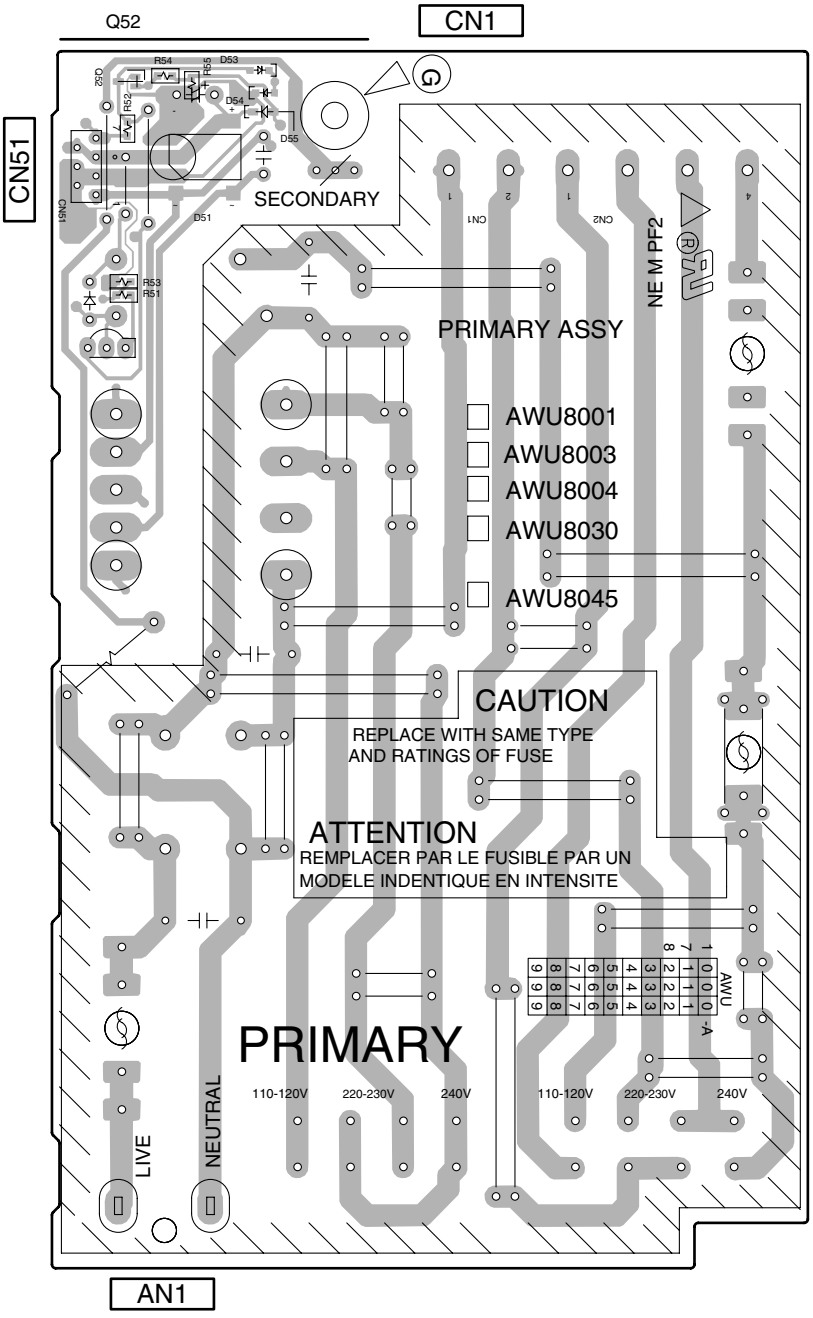
E PRIMARY ASSY



SIDE B

SIDE B

E PRIMARY ASSY



(ANP7432-B)

E

E

5 6 7 8

5. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56 x 10[1] → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47 x 10[3] → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562 x 10[1] → 5621 ..... RN1/4PC 5 6 2 1 F

LIST OF ASSEMBLIES

Mark	Symbol and Description	S-DV1000SW/ KUCXJI	S-DV1000SW/ MYXJI	S-DV1000SW/ NVXJI
NSP	1..DVD AMP ASSY	AWM7709	AWM7707	AWM7707
	2..PRIMARY ASSY	AWU8003	AWU8001	AWU8001
	2..AF ASSY	AWU8005	AWU8005	AWU8005
	2..POWER ASSY	AWU8007	AWU8006	AWU8006
	2..TRADE 1 ASSY	AWU8028	AWU8028	AWU8028
NSP	1..AMP MODULE 6CH	AXQ7242	AXQ7242	AXQ7242
	2..6CH AMP ASSY	AWM7720	AWM7720	AWM7720

• CONTRAST OF PCB ASSEMBLIES

E PRIMARI ASSY

AWU8003 and AWU8001 are constructed the same except for the following :

Mark	Symbol and Description	AWU8003	AWU8001
	R1 (2.2M ohm/ 1/2W)	RCN1080	Not used
	T2 STANDBY TRANSFORMER	ATT7079	ATT7078
	AN1 AC INLET 1P	XKP3042	XKP3041
	KN2 EARTH METAL FITTING	VNF1084	Not used

D POWER ASSY

Although AWU8007 and AWU8006 are different in part number, they have the same service parts.

• PARTS LIST FOR S-DV1000SW/KUCXJI

Mark No.	Description	Part No.
A AF ASSY		
SEMICONDUCTORS		
IC3002–IC3004, IC3102–IC3104		BA4558F-HT
IC3001		M62446FP
IC3101		UPC4570G2
Q3004, Q3005		2SC4081
Q3009		UN5112
Q3081		UN511L
Q3008		UN5212
Q3006		UN521L
D3004–D3006		1SS133
D3003		MTZJ2.7B
D3001, D3002		UDZS6.8B
D3007–D3030		UDZS8.2B
CAPACITORS		
C3034–C3036		CCSRCH101J50
C3003, C3004, C3009, C3010		CEAL100M16
C3015, C3016, C3019, C3020, C3043		CEAL100M16
C3045		CEAL100M16
C3032		CEAL101M6R3
C3021, C3022		CEAL221M10
C3048		CEAL470M16
C3037, C3121, C3122		CEAT100M50
C3081, C3082		CEAT220M50

Mark	No.	Description	Part No.
	C3038, C3047, C3107, C3108		CEAT470M25
	C3118, C3119		CFTLA224J50
	C3001, C3002, C3007, C3008		CKSRYB103K50
	C3013, C3014, C3025, C3028, C3031		CKSRYB103K50
	C3105, C3106, C3109, C3110		CKSRYB103K50
	C3113, C3114, C3117, C3120		CKSRYB103K50
	C3023, C3024		CKSRYB104K25
	C3111, C3112, C3115		CKSRYB123K50
	C3101, C3102		CKSRYB183K25
	C3103, C3104		CKSRYB223K50
	C3116		CKSRYB273K16
	C3123		CKSRYB332K50
	C9001, C9002		CKSRYB392K50
	C3566, C3568		CKSRYB473K50
	C3026, C3029		CKSRYB474K10
	C3133, C3134		CKSRYB561K50
	C3130–C3132		CKSRYB681K50
	C3027, C3030		CKSRYB822K50
	C3017		CQMBA683J50
	C3570 (10pF/100V)		XCG3008

RESISTORS

	R3035, R3036	RD1/2PM151J
	R3041	RD1/2PM222J
	R3040	RD1/4PU273J
	R3050	RS1/10S0R0J
	R3005–R3008, R3015–R3018	RS1/16S1001F
	R3025–R3028	RS1/16S1001F
	R3001–R3004, R3011–R3014	RS1/16S2201F
	R3021–R3024	RS1/16S2201F
	Other Resistors	RS1/16S###J

OTHERS

	3701 CABLE HOLDER(4P)	51052-0400
	3702 CABLE HOLDER(4P)	51052-1000
	CN3601 2P CONNECTOR	5569-02A1
	CN3703–CN3705 23P SOCKET	AKP7075
	CN3702 20P SOCKET	AKP7129
	CN3701 12P CONNECTOR	AKP7131
	J3701 JUMPER WIRE	D25PDD0415E
	J3702 JUMPER WIRE	D25PDD1015E
	PCB BINDER	VEF1040

B TRADE 1 ASSY

OTHERS

	3703 CABLE HOLDER(4P)	51052-0400
	3704 CABLE HOLDER(10P)	51052-1000
	CN3707 13P SOCKET	AKP7070
	CN3706 15P SOCKET	AKP7071

C 6CH AMP ASSY

SEMICONDUCTORS

⚠	IC81	NJM7805FA
⚠	IC71	NJM7912FA
⚠	IC3301, IC3401	STK402-270
	Q3382, Q43	2SA1576A
	Q62	2SB1237X
	Q111, Q3381, Q63, Q92	2SC4081
⚠	Q61	2SD2012
	Q3301, Q3302, Q3401, Q3402	2SD2114K
	Q3501, Q3502, Q3504	2SD2114K
	Q3654	2SD2144S
	Q107, Q3653	DTA124EUA
	Q3652	DTA124TK
	Q106	DTC124EUA
⚠	Q3383, Q91	IRFI9Z34G
⚠	Q3384	IRFIZ34G
	Q3651	RN1901
	Q101, Q103	UMB1N
	Q102, Q104	UMH1N
⚠	D3321–D3326	1SR139-400
	D3327, D3328	1SR139-400
⚠	D3421–D3426	1SR139-400
	D3427, D3428	1SR139-400
	D3387, D3388, D3651–D3655	1SS133
	D101, D102, D104, D3657, D42	1SS355
⚠	D3381, D3382, D3481, D3482	DAN217
⚠	D3581, D3582	DAN217
	D3391, D3392	LT2A03
	D3389, D3390	MTZJ10C
⚠	D98	MTZJ11B
⚠	D72	MTZJ15C
	D3393, D3394	MTZJ18B
⚠	D63	MTZJ18C
	D3385, D3386	MTZJ36A
⚠	D82	MTZJ7.5C
	D91	UDZS18B
	D105, D106, D3658	UDZS7.5B
	TH111	NCP18WF104J03RB

CAPACITORS

	C3305, C3306, C3405, C3406	CCSRCH221J50
	C3505, C3506, C62, C97	CCSRCH221J50
	C3309, C3310, C3409, C3410	CCSRCJ3R0C50
	C3509, C3510	CCSRCJ3R0C50
	C3307, C3308, C3407, C3408, C3508	CEAL100M16
	C3507	CEAL470M6R3
	C72	CEAT100M50
	C3651	CEAT101M25
	C101, C102	CEAT1R0M50
	C3323, C3324, C3423, C3424	CEAT221M50
	C3167, C3168, C3178, C3179	CEAT2R2M50
	C3301, C3302, C3317, C3318	CEAT2R2M50
	C3401, C3402, C3501, C3502	CEAT2R2M50
	C3652, C63, C82, C98	CEAT470M25
	C3653	CEAT470M35
	C3303, C3304, C3403, C3404	CKSRYB102K50
	C3503, C3504	CKSRYB102K50
	C92	CKSRYB104K16
	C71, C81	CKSRYB473K50

RESISTORS

⚠	R3327, R3328, R3427, R3428	RD1/4MUF470J
	R3387, R3388	RD1/4PU101J
	R3657	RD1/4PU330J
	R96, R97	RS1/16S1002F
⚠	R3323, R3324, R3351, R3423, R3424	RS1/16S1R0J
⚠	R3451	RS1/16S1R0J
	R67, R68	RS1/16S2201F
	R94, R95	RS1/16S2701F
⚠	R62	RS1/16S330J

Mark	No.	Description	Part No.
	R65		RS1/16S4700F
	R47, R48		RS1/16S4701F
	R3317–R3320, R3417–R3420		RS2LMFR22J
	R3517–R3520		RS2LMFR22J
	Other Resistors		RS1/16S###J

OTHERS

	CN3001, CN3002 23P PLUG	AKP7064
	CN3651 PLUG(2P)	KM200SA2

D POWER ASSY

SEMICONDUCTORS

⚠	IC3051 PROTECTOR(5A)	AEK7046
⚠	IC33	NJM7812FA
	Q3351, Q3352, Q3451, Q3452	2SC4081
	Q3551, Q3552, Q3604, Q3605, Q3610	2SC4081
	Q3612, Q3615	2SC4081
	Q3614	2SD1858X
	Q3606, Q3608	DTA123JS
	Q3602, Q3611, Q3613	UN511L
	Q3601, Q3603, Q3607, Q3609	UN521L
	D3601–D3604, D3606	1SS133
	D3351–D3354, D3361, D3451–D3454	1SS355
	D3461, D3551–D3554, D3561	1SS355
⚠	D11, D31, D41	D5SBA20(B)
	D3605	DA204K

COILS AND FILTERS

	L3361, L3362, L3461, L3462	ATH-059
	L3561, L3562 AF COIL	ATH-059

CAPACITORS

	C33, C34 (4700uF/35V)	ACH7171
	C18, C19 (2200uF/50V)	ACH7172
	C3601	CEAL100M50
	C3602	CEAL101M10
	C3604	CEAL470M16
	C35	CEAT100M50
	C3603	CEAT101M10
	C37	CEAT470M25
	C42	CEAT682M25
	C3552, C36	CKSRYB103K50
	C3365–C3368, C3465–C3468, C3565	CKSRYB473K50
	C3567	CKSRYB473K50
	C31, C32	CQMBA103J50
	C20–C23, C3301–C3304	XCG3008
	C3369, C3370, C3469, C3470, C3569 (10pF/100V)	XCG3008

RESISTORS

	R3351, R3352, R3451, R3452	ACN7112
	R3551, R3552 (0.1 ohm/2W)	ACN7112
	R3361, R3362, R3461, R3462	RD1/2PM101J
	R3561, R3562	RD1/2PM101J
	R31	RD1/4PU100J
	R3602	RD1/4PU222J
	R3621, R3622	RD1/4PU820J
	Other Resistors	RS1/16S###J

OTHERS

	3401 SPEAKER TERMINAL10-P	AKE7081
	CN3053 7P PLUG	AKP7056
	CN3051 13P PLUG	AKP7059
	CN3054 15P PLUG	AKP7060
	CN3052 23P PLUG	AKP7064
	H41, H42 FUSE CLIP	AKR7001
	RY3361, RY3461, RY3561 SP RELAY	ASR7008
	CN11 7P VH CONNECTOR	B7P-VH
	KN3001 EARTH METAL FITTING	VNF1084

E PRIMARY ASSY

SEMICONDUCTORS

	Q52	2SC4081
	Q51	2SD1858X
	D52	1SS133
	D53, D54	1SS355
⚠	D51	S1WB(A)60SD
	D55	UDZS20B

COILS AND FILTERS

⚠	L1 LINE FILTER	ATF7018

TRANSFORMERS

⚠	T2 STANDBY TRANSFORMER	ATT7079

CAPACITORS

⚠	C1, C2 (0.022F/AC275V)	ACE7022
⚠	C3 (10000pF/AC250V)	ACG7033
	C52	CEAT102M25

RESISTORS

⚠	R1 (2.2M ohm/ 1/2W)	RCN1080
	Other Resistors	RS1/16S###J

OTHERS

	CN51 7P SOCKET	AKP7067
	H1, H2 FUSE CLIP	AKR7001
⚠	RY51 RELAY	ASR7027
⚠	CN1 2P VH CONNECTOR	B2P3S-VH
	KN2 EARTH METAL FITTING	VNF1084
⚠	AN1 AC INLET 1P	XKP3042

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

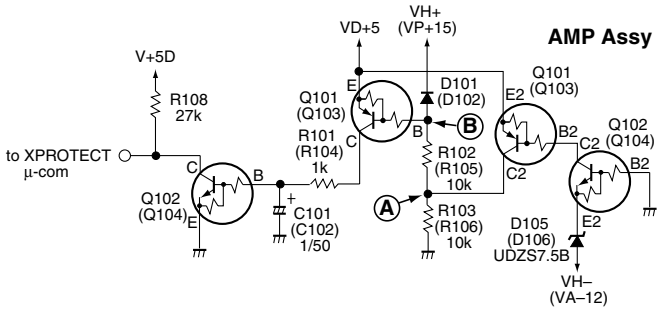
7.1 DIAGNOSIS

7.1.1 PROTECTION CIRCUIT

Note: • Refer to the Schematic Diagram about the actual circuit.
(The □ number corresponds to the ▭ marked circuits.)

3 Short Circuit Detection Circuit of AMP Power Line (+15V(VP+15), Vb+5, -12V(VA-12))

The Circuit for making POWER OFF when VP+15, VD+5 and VA-12 is short-circuited (to GND).



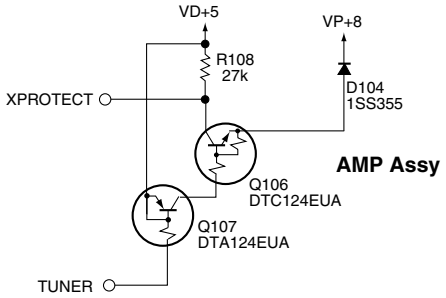
●At normal state as Q101 (E2, B2, C2)(Q103), Q102 (E2, B2, C2) (Q104) is ON state, Ⓐ point is about 5V. Therefore Ⓑ point is also almost the same voltage as Ⓐ and Q101 (E, C, B) (Q103) do not turn ON, and Q102(E, C, B) do not turn ON.

(1) When VH+(VP+15) is short-circuited (to GND)
Ⓑ point voltage becomes almost GND level and turned to be operating point for Q101(E, C, B)(Q103). Therefore Q101(E, C, B) (Q103) turns ON. Also Q102(E, C, B)(Q104) turns ON. Then XPROTECT becomes LOW level.
→U-com detects the XPROTECT level and sets Power OFF.

(2) When VH–(VA–12) is short-circuited
AS VE of Q102 (E2, C2, B2)(Q104) becomes the same voltage as VB, Q102(E2, C2, B2) (Q104) turns OFF.
And Q101 (E2, B2, C2)(Q103) becomes OFF. Therefore the voltage of Ⓐ and Ⓑ points are not 5V, Q101 (E, C, B)(Q103) turns ON. Also Q102(E, C, B)(Q104) turns ON. Then XPROTECT becomes LOW level.
→U-com detects the XPROTECT level and sets Power OFF.

(3) When VD+5 is short-circuited
The line voltage of XPROTECT becomes Low level, then U-com detects and set the POWER OFF.

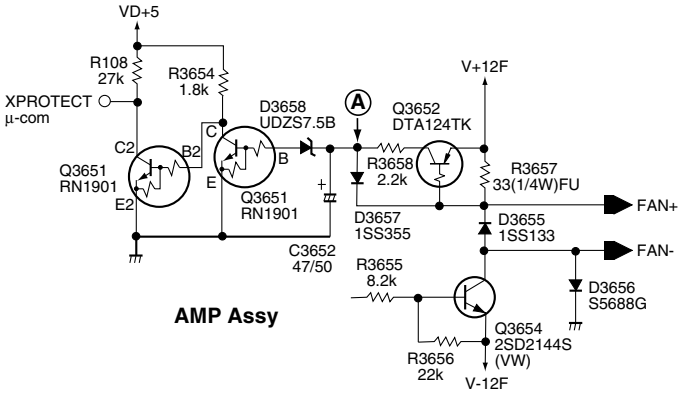
4 Short Circuit Detection Circuit of DVD Power Line (VP+8)



VP+8 is Power Line when the set is DVD Function (TUNER is High level).
At this time when VP+8 is short-circuited, as TUNER is Low level, Q106 turns ON and XPROTECT becomes Low level.
→U-com detects the XPROTECT level and sets Power OFF.

Except DVD Function even if VP+8 is GND level, as TUNER is also High level, Q107 is OFF and XPROTECT does not become LOW level.

6 FAN Detection Circuit



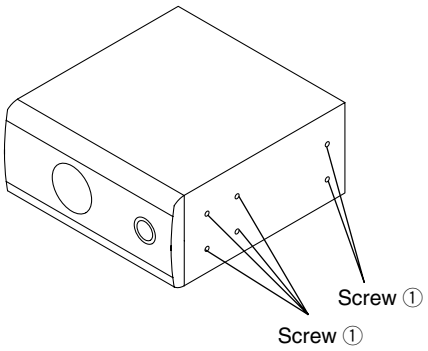
When the FAN is not connected between FAN+ and FAN-, or FAN is locked state as the foreign matter is blocked, Q3652 Base turns open, and then Q3652 and Q3651(E, C, B) turns OFF. Then Q3651 (E2, B2, C2) turns ON and XPROTECT becomes LOW level.
→U-com detects the XPROTECT level and sets Power OFF.

When FAN+ and FAN- is short-circuited, Ⓐ point voltage becomes higher than GND level because of part D3656 and D3657.
Then it is lower than part D3658, Q3651(E, C, B) turns OFF and Q3651(E2, B2, C2) turns ON, and XPROTECT becomes LOW level.

7.1.2 DISASSEMBLY

1. Removing the Amplifier Assy

1) The Amplifier Assy is attached to the cabinet by 6 external screws ①. To detach it, pull down the subwoofer toward the left side.
2) Then unfasten those screws ① .
3) Then stand up the speaker again. To detach the Amplifier Assy, first remove the connecting code. Then pull straight the Amplifier Assy toward back and remove it.

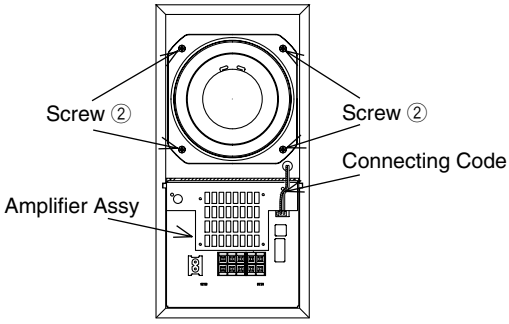


2. Removing the Subwoofer

1) The speaker element is attached to the back board by 4 external screws ②.To detach it, unfasten those screws.
2) When attaching it,face its terminal upward.

3. Removing the Cosmetic Baffle

1) The cosmetic baffie is attached to the baffle by press-fitting. To detach it,pry it open by inserting a flat blade screwdriver into lower side.



4. Removing the Cosmetic Duct

1) The cosmetic baffle, those screws are removed when removing the cosmetic duct attached in cosmetic baffle with 4 screws.

7.2 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ M62446FP (AF ASSY : IC3001)

● EXPAND port in E-vol IC

No.	Mark	Pin Name	Pin Function	Active
4	Q1	NOISEHELP	Noise help	H
3	Q2	CMUTE	Control C mute	H
2	Q3	SPRYRC	Control relay for rear and center speaker	H
1	Q4	SPRYS	Control relay for front speaker	H

7.3 CLEANING

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008